Sault College Program Guide 2020-2021

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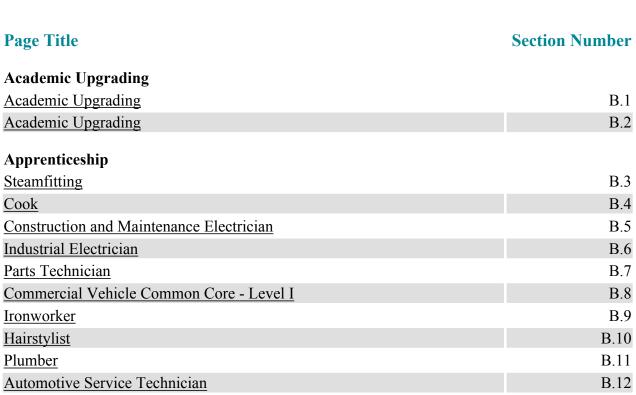
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Section C

# **Campus Tours**

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Section A.1 2017-06-22



### **CAMPUS TOURS**

This is an important time in your life and you're about to make some very important decisions about how you're going to spend the next few years. Our Student Recruitment team invites you to come and check out our new modern campus. We can accommodate students, parents, teachers, counsellors and large groups for campus tours, and faculty visits. For students attending college for the first time, such as adult learners, mature students or from any other background there are many factors to consider when applying to college. This is your chance to see exactly why Sault College is the right place for you!

To learn more about a program you may be interested in taking, check out our website under "Ask Us" or request more information to be mailed to you.

We are here to help you through the application and admission process and with all your college needs, so please don't hesitate to contact us.

### GETTING THE MOST OUT OF YOUR CAMPUS TOUR

When deciding on a College, thousands of students venture out across the province and tour potential campuses, looking for answers on which school you should choose.

Now, before you grab your map and jump in the car, here are some suggestions for making every campus tour you take worthwhile:

### **BEFORE THE TOUR**

- 1. Research the school Know what the school has to offer in terms of programming, co-op options, transfer agreements and admission requirements. It is also good to check into varsity sports, student services, aboriginal supports, financial aid, health services and what style of residence is offered.
- 2. Research the city Knowing a little about the city where you may spend the next few years of your life is important. Are there certain activities you are looking to participate in? If you don't plan to live in residence, how close is safe and affordable off-campus housing?
- 3. Prepare your questions Bring a list of questions with you and be sure to pull it out and get answers on your tour. Don't be too shy to ask! It is important to know things like: "If living in residence, how many people will share a bathroom?"
- 4. Make arrangements If you would like to sit in on a class, talk to a professor or meet with student services just ask. When arranging a tour, be sure to plan all specifics, so everything is prepared when you get there.

### WHILE ON THE TOUR

1. Ask questions – Pull out your list of questions and write down the answers. After touring the fifth school, you won't remember which college offered free tutoring or much of anything else.

2. Use your camera – This is a great way to remember one school from the next. It's a good idea to take pictures of the residence, library, classrooms – especially any labs that you would be using, as well as your tour guide. This way, when you look back at pictures, you will easily identify one school from the next.

### AFTER THE TOUR

- 1. Write it down Before you leave the school take a moment to write down some of your impressions. You will be glad you did this. Write down your impressions of the campus and how you felt walking through.
- 2. Ask for contact information Be sure you get your tour guide's name, e-mail address, and phone number so you can contact them when you have more questions.

Call Sault College's Student Recruitment Team at 705-759-2554 ext. 2222 to book your campus tour or to ask for more information about applying to college. Or email us at <a href="mailto:studentrecruitment@saultcollege.ca">studentrecruitment@saultcollege.ca</a>.

Section A.2 2019-08-30

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## HOW TO APPLY TO SAULT COLLEGE

- 1. Apply online at <u>www.ontariocolleges.ca</u> by February 1<sup>st</sup> to be eligible for equal consideration. Follow the prompts to complete the process. There is a non-refundable \$95 fee to apply, payable to ontariocolleges.ca.
- 2. Various communications will be provided to you, from Sault College. An email will be sent acknowledging receipt of your application.
- 3. Offers of admission for the fall intake are mailed as early as February 1<sup>st</sup> to the address provided on your application. Confirm your offer by May 1st at <u>www.ontariocolleges.ca</u>
- 4. Your fees must be paid by the fee deadline date to reserve your seat. Further documentation is available on the Student Portal.

### **ADMISSIONS**

### A. MINIMUM REQUIREMENTS

i) Minimum requirements for admission to any postsecondary program is an Ontario Secondary School Diploma (OSSD) (30 credits) or its equivalent or mature applicant status. Some programs have specific requirements in addition to the minimum admission requirements.

ii) Minimum requirements for admission to an Ontario College Graduate Certificate program is an Ontario College Diploma or university degree.

iii) Minimum requirements for admission to any degree program is an OSSD diploma including university level credits where indicated.

iv) Consideration will be given to applicants who have successfully completed college preparatory programs such as, but not limited to, Pre-Health, Pre-Trades, General Arts and Science—One Year and Academic and Career Entrance (ACE).

The College may publish other recommendations that enhance student success. Applicants should consult individual program descriptions available on the website.

(See Section J regarding collaborative programs)



### **B. OSSD EQUIVALENT**

Recognized equivalents to the Ontario Secondary School Diploma are listed below and are accepted on the understanding that the applicant meets all requirements in particular subjects and/or subject averages.

- All provinces and territories, other than Quebec Grade 12
- Quebec High School Leaving Certificate (Secondary V)

Other academic qualifications may be evaluated as equivalent, as deemed appropriate by the Registrar's Office.

### C. MATURE APPLICANTS

An individual who does not have an OSSD or equivalent but has reached the age of 19 may be admitted as a mature applicant. Mature applicants may be referred to Student Services for admission testing.

### D. GENERAL EDUCATION DEVELOPMENT IN ONTARIO (GED)

Applicants successfully completing GED requirements will be assessed for admission as equivalent to secondary school graduates. Additional program specific admission requirements must still be completed.

### E. OTHER APPLICATIONS

Applicants who have completed studies utilizing independent curriculum (i.e. home-schooled) may be admitted through a process similar to that of the mature applicant. The applicant is referred to Student Services for admission testing, as well as being required to submit available transcripts and curriculum for equivalency review.

### F. APPLICANTS WITH INTERNATIONAL CREDENTIALS

Completion of secondary school along with program-specific admission requirements is necessary; equivalencies will be determined by the Registrar's Office. Applicants with International credentials in languages other than English must be submitted with a certified true translation, along with the official academic record in the language of instruction.

### G. APPLICANTS WITH FIRST LANGUAGE OTHER THAN ENGLISH

Sault College instructs its courses in English, and as such, an applicant must demonstrate English proficiency to meet the demands of our programs. To demonstrate English proficiency, applicants must have studied in an English speaking secondary or post-secondary institution for a minimum of 3 years in any of the following countries: Canada, Australia, Ghana, Kenya, Mauritius, Nigeria, New Zealand, Singapore, United States of America, United Kingdom, and Caribbean countries excluding Cuba, Dominican Republic, Haiti, and Puerto Rico, or completed English training as deemed equivalent by the Registrar's Office.

Applicants, for whom English is not a first language and have not studied in the countries noted above, must provide proof of English language proficiency. Acceptable tests of English language proficiency include: TOEFL (79 iBT, 213 CBT, 550 PBT for diploma programs); IELTS 6.0 with no band lower than 5.5; CAEL 60; MELAB 60%; CAE 52-57 or level B2; CPE C grade or higher; TOEIC – GOLD 860 or higher; Duolingo 5.0 or higher; Pearson PTE 60; or sufficient achievement on another accepted test for English language proficiency.

Where appropriate, if applicants do not meet these minimum requirements, successful English language training may be required prior to the start of the academic program.

### H. CREDIT TRANSFER OR ADVANCED STANDING APPLICANTS

Applicants seeking advanced standing including college-to-college transfers or advance credit transfer will follow the Prior Learning Assessment and Recognition (PLAR) policy, Credit Transfer policy and/or General Education Credit Transfer policy.

### I. OVERSUBSCRIBED PROGRAMS - SELECTION PROCEDURES

### Priority of Admissions

The established MTCU priority for admissions for over-subscribed programs is as follows:

- 1. Permanent residents of Ontario
- 2. Permanent residents from other Canadian provinces and territories
- 3. International applicants

The College procedure for selection in oversubscribed programs is as follows:

If, after all other selection procedures have been applied and there are more qualified applicants than spaces available in a given program, selection criteria beyond those of program eligibility may be used. The criteria shall be determined on a program-specific basis and must be capable of objective demonstration or measurement and be relevant to the program.

Program specific ranking information may be requested from the Registrar's Office. Waiting lists are to be established for oversubscribed programs and maintained up to the end of the registration period. Applicants must, on their request, be informed of their relative positions on the wait list. Movement takes place as vacancies arise.

For oversubscribed programs, 10 percent of seats available are held for students currently enrolled and successfully completing an internal preparatory Ontario College Certificate with an overall GPA of 2.5 or greater as well as any other admission requirements for their program of choice.

### Applicants from Access Programs (ACE)

For oversubscribed programs, students must have a grade point average of 2.5 or greater in the ACE program along with program specific admission requirements.

### **Designated Seats**

For some health programs (Collaborative Bachelor of Science in Nursing, Practical Nursing, Occupational Therapy Assistant/Physiotherapist Assistant, Pre-Health), 5 percent of seats, in addition to any selected through the admission ranking process, will be held for applicants who self-identify as Indigenous (First Nation, Métis or Inuit).

### J. COLLABORATIVE PROGRAM

Collaborative program refers to a program where the College and another postsecondary institution agree to jointly deliver a program. Admission requirements for collaborative programs will be determined on a program-by-program basis with the postsecondary institutions involved.

### K. CRIMINAL RECORD CHECK

Applicants applying for enrolment in programs that involve placement, practicum or outreach activities may require a Criminal Record Check as part of the placement requirements. The applicant should review specific program requirements.

### L. ADMISSION REVIEW PROCESS

Applicants that are refused admission to the College have the opportunity to request the reason(s) for which they were refused admission to their program of choice. Applicants who are not satisfied with the reason(s) for the refusal can request a review of their application.

### ADMISSION REVIEW PROCEDURE

- These requests will be made, in writing, to the Registrar's Office within 10 business days of the date of the refusal letter. The submission will include the nature of the request and any supporting information/documentation to be considered in a review of the decision.
- The Registrar or designate will convene a meeting of the Admissions Review Committee, consisting of the Registrar, Director, Enrolment and Financial Services, Chair of the program in question, and where applicable, the Program Coordinator.

A final decision on behalf of the committee will be communicated to the applicant within 10 business days of the receipt of the appeal.

### **IMPORTANT DATES:**

- 1. Students can apply as early as October of each year at <u>www.ontariocolleges.ca</u>
  - a. All applications received up to February 1 are treated equally.
  - b. All applications received on or after February 2 are treated on a first-come, first-served basis.
  - c. All offers are subject to the final achievement of an Ontario Secondary School Diploma or its equivalent, and successful completion of specific program admission requirements.
- 2. An application fee as designated in the application guidelines must be received by ontariocolleges.ca in order for the application to be processed and sent to the college.
- 3. It is the responsibility of the student to ensure that their official mid-term grades and final Grade 12 grades are forwarded to the Ontario College Application Service directly from their school. A decision regarding acceptance cannot be made if grades are not submitted.
- 4. Sault College Registrar's Office staff, recruiters and counsellors are available to assist prospective students.
- 5. You must accept your offer of admission at <u>www.ontariocolleges.ca</u>
- 6. May 2<sup>nd</sup> is the earliest date any college can withdraw an offer of admission.
- 7. Payment or deferral of tuition fees must be made by the fee payment date, as established on the "Key Dates Calendar" in order to reserve a seat.

### FREQUENTLY ASKED QUESTIONS

For programs listed, at <u>www.ontariocolleges.ca</u>, (the application processing service owned and operated by Ontario's publicly-funded colleges). There is a non-refundable fee to apply (see <u>www.ontariocolleges.ca</u> for details).

### Q. How do I contact ontariocolleges.ca?

A. Call the Customer Contact Centre at 1-519-763-4725 or 1-888-892-2228 (toll free within Canada) or Email:

ask-us@ontariocolleges.ca

The mailing address is: Ontario Colleges 60 Corporate Court, Guelph, ON, N1G 5J3

### Q. What do I need to do about my transcripts?

A. What you need to do depends on a number of items:

If you are currently in high school in Ontario - let your Guidance Office know that you are applying to college and they will send your transcripts to ontariocolleges.ca for you.

If you are currently in high school in another Canadian province - you need to send one (1) official transcript to <u>www.ontariocolleges.ca</u>

If you are out of high school - you need to arrange with your last high school to have one (1) official transcript sent to ontariocolleges.ca. Depending on where you went to high school, you may be able to request your transcript electronically through the transcript request service at www.ontariocolleges.ca. If not, contact your last high school directly. Call the Board of Education if your high school has closed.

If you are applying as a mature student – you need to arrange with your last high school to have one (1) official transcript sent to ontariocolleges.ca.

If you have attended an Ontario college or university - order your official transcripts through the transcript request service at <u>www.ontariocolleges.ca</u>.

If you attended a college or university outside Ontario, but still in Canada - you must request that the institution you attended send an official transcript to ontariocolleges.ca.

If you are sending documents from any educational institution outside of Canada, an original or certified copy of the documents needs to be sent directly to Sault College or to one of the following agencies to have an evaluation of your credentials completed:

WORLD EDUCATION SERVICES

www.wes.org/ca Tel: 416-972-0070 Toll free: 800-361-6106

OR

International Credential Assessment Service of Canada ICAS of Canada Ontario AgriCentre 100 Stone Road West, Suite 102 Guelph ON N1G 5L3

Telephone: 519-763-7282 Toll free in Canada: 1-800-321-6021 Fax: 519-763-6964 e-mail: info@icascanada.ca

# Paying for College

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Paying your fees is a very important part of registering at Sault College. It helps us prepare for your studies before you get here and makes sure the proper resources are available to you once you begin studying. Be sure to arrange for payment as soon as you receive a reminder in the mail to save your spot in the program of your choice. This is especially important to do in programs that have waitlists.

Section A.3 2017-06-29

SAULT

COLLEGE

The Student Financial Assistance Office is available to help you if you are experiencing difficulties in meeting your educational costs. Along with OSAP (Ontario Student Assistance Program), our office handles SBA (Scholarships, Bursaries & Awards), and the Tuition Fee Bursary Program, including Entrance Awards. We also offer a number of other financial aid services, budget counselling for groups or individuals, high school OSAP workshops, classroom presentations, and seminars on debt repayment.

The Student Financial Assistance Office also supports Campus Work Study, Student Exceptional Expense Bursaries, Parttime Canada Student Loans, and more.

For more information, please visit us on-line at <u>www.saultcollege.ca.</u>

### **ONTARIO STUDENT ASSISTANCE PROGRAM (OSAP)**

If you are applying for College, you may wish to apply for OSAP. On-line OSAP applications are available at <u>www.ontario.ca/osap</u>. To make sure your funding is in for the fall, applications must be entered and supporting documentation including "Consents, Declarations and Signature" pages must be sent to the Student Financial Assistance Office at the College by June 30.

The amount of OSAP you receive is based on your financial need and in some cases, your parents' or spouse's income. Please keep in mind that each case is assessed on an individual basis.

Application processing normally takes 4 to 6 weeks. All information provided with an OSAP application is subject to verification and audit by the Ministry of Advanced Education and Skills Development.

If you are a registered full-time student with us who has applied for OSAP, and have provided all required documentation, your funds will automatically be deposited into your bank account between three and seven days after your classes start in the fall.

### SAULT COLLEGE ENTRANCE AWARDS

As a first year student, you are strongly encouraged to apply for a Sault College Entrance Award with details provided in the letter of offer that is mailed out to you when you are accepted into College. The value of this award is \$500. An online application is available between the first of February and mid-May at <u>www.my.saultcollege.ca</u>.

### **SCHOLARSHIPS & AWARDS**

As a full-time student attending Sault College, you may apply for a variety of excellent scholarships, awards, medals, and bursaries we offer. Our College gives out over \$1.65 million dollars in funding each year to our students. Scholarships are normally awarded on the basis of academic achievement. Students applying for scholarships will need to maintain at least a 3.0 accumulated GPA. Bursaries are awarded primarily on the basis of financial need. Awards are usually awarded on the basis of both financial need and academic performance. All scholarships and awards are intended to encourage a high standard of academic achievement. An online application is available between October 1<sup>st</sup> and mid-November on the student portal <u>www.my.saultcollege.ca</u>. The Student Financial Assistance Office has student computers for you to use and are willing to offer the necessary supports to help you with your application.

Please visit us office in Room M1200, email us at <u>Student.Financial.Assistance@saultcollege.ca</u>; or call us at 705-759-2554 ext: 2704.

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### A. PROCEDURES

Students who have paid, deferred their fees, or for whom the College has received a Letter of Sponsor Authorization will become registered in their program. Once registered, students must officially withdraw from the College by Day 10 (as identified on the Key Dates Calendar) to be eligible for a refund (less the \$100.00 administration fee). Non-attendance does not constitute a withdrawal – an official withdrawal is required.

Section A.4

2017-10-26

SAULT

COLLEGE

### **B. LATE REGISTRATION**

Late registration and changes in registration may be allowed until the second week of classes with the Chair/Dean's permission.

A late payment fee of \$150 will be charged if tuition is not paid or deferred by the fee payment deadline. If acceptance is granted after this deadline, the late payment fee will be charged if tuition is not paid or deferred within 14 days of acceptance.

The program start dates are listed in the Key Dates Calendar available to students in their Online Admissions Guide, on the Student Portal at <u>www.mysaultcollege.ca</u> and at <u>www.saultcollege.ca/importantdates</u>.

### C. CONTINUING EDUCATION COURSES

Registered full-time students who are unable to register for a course required to graduate from their program because of timetable conflicts or other problems, may take this course or its equivalent, if available, through Continuing Education. Approval must be granted by the Chair/Dean and additional administrative fees may apply.

### D. WITHDRAWAL FROM A COURSE OR PROGRAM

To officially withdraw from a course or program, students must visit the Chair/Dean's Office to complete a Withdrawal Form. If you are considering withdrawing from the College, it is recommended that you pursue the advice of a Counsellor in Student Services or the Program Coordinator to help you assess your situation and determine your next steps.

If you officially withdraw from the College by the "last day to withdraw from a course or program without financial penalty" as specified on the Key Dates Calendar, no grades will appear on your transcript. A refund of fees paid (less an administration fee) will be issued.

Students may withdraw from any course without academic penalty after Day 10 (last day to drop courses without financial penalty) and the "last day to drop courses without academic penalty" as specified on the Key Dates Calendar. A "W" grade will be recorded on your transcript. No refund of fees will be issued.

If you officially withdraw from the College after the "last day to drop courses or a program without academic penalty" as specified in the Key Dates Calendar, an "F" grade will appear on your student record for all courses in that term. No refund of fees will be issued.

If a student decides to transfer from one program to another, they are required to consult with the Chair/Dean of both programs, as well as with the Registrar's Office, to determine eligibility for their new program. Approval must be received from all offices before commencement of classes in the new program.

### F. CHANGE OR CANCELLATION OF COURSES/PROGRAMS

Although it is fully intended to adhere to the programs of study and policies as announced in this program guide, the College reserves the right to make changes as deemed necessary without prior notice.

### G. PROGRAM CANCELLATION POLICY

In the event that it becomes necessary to cancel or suspend a program or programs, the College will ensure that students enrolled in the affected program(s) will be given every opportunity to complete their studies in the normal time period (i.e. the Ministry-approved program duration). The College assumes no responsibility to offer these program(s) in full or in part beyond this time frame.

If a transfer to another college is more practical for both the students and the College, Sault College will take the responsibility of assisting the students to become enrolled in the same program offered by another college within a reasonable distance.

### H. Prior Learning Assessment and Recognition (PLAR)

Prior Learning Assessment and Recognition (PLAR) offers learners the opportunity to earn credit for College courses based on formal demonstration of prior learning usually acquired through study, work and other life experiences that is not recognized through formal credit transfer mechanisms.

Prior Learning Assessment and Recognition (PLAR) is a process that uses a variety of tools to help learners reflect on, identify, articulate and demonstrate past learning.

Prior Learning Assessment and Recognition (PLAR) includes the challenge exam process and portfolio assessment as defined below.

- Challenge Process: A method of assessment developed and evaluated by subject-expert faculty to measure an individual's learning achievement against course learning outcomes. The process measures demonstrated learning through a variety of written and non-written evaluation methods for the purpose of receiving a final grade without requiring enrolment in a course.
- Portfolio Assessment: A method of assessment that involves the evaluation of an organized collection of materials developed by a learner that records learning achievements and relates them to personal, educational, or occupational goals that demonstrates achievement of stated learning outcomes of college courses or programs.

To be eligible for Prior Learning Assessment and Recognition (PLAR) a candidate must be at least 19 years of age or a secondary school graduate. A student may be eligible to obtain through Prior Learning Assessment and Recognition (PLAR) credits up to a maximum of 75% of the courses required for a credential. A student must complete at least 25% of the senior level program credits at Sault College to be eligible to receive a Sault College credential.

# **Continuing & Distance Education**

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

### CONTINUING EDUCATION

Sault College Continuing Education is here to support you in your learning. If you need or want to combine in-class courses with those delivered on-line for your program of study, please let us know!

We are committed to developing new and better ways to meet the growing needs of the part-time adult learner. The growth of activity in this area over the past several years reflects the need for on-going professional and skills development to meet the changing workplace.

Sault College advertises all Continuing Education learning opportunities in a course guide that is published three times annually that is available on-campus or posted electronically on our website at <u>www.saultcollege.ca</u>.

### WHO TO CONTACT

Questions or comments? Call the Continuing Education Services Officer at 705.759.2554 ext. 2658 or <u>continuingeducation@saultcollege.ca</u>.

### **DISTANCE EDUCATION**

Distance Education allows you to complete your courses of study at a time and place that is convenient for you. Distance Education takes place when a facilitator and students are separated by physical distance and a technology (i.e. voice, video, internet, cd/dvd and print) provides the means for learning.

Sault College offers three modes of technology to facilitate distance learning. They are:

- Contact North (audio conferencing, video conferencing and e-learning technologies)
- Online Learning via Ontariolearn
- Independent Study

With each mode of learning, a facilitator is present to lead, coach and evaluate the distance education student. Some programs offer courses in a variety of learning modes. For a complete listing of programs please visit <u>www.saultcollege.ca/distance</u>. For a complete listing of courses, visit <u>www.saultcollege.ca/distance</u>, and search by keyword(s) or by category.

### **CONTACT NORTH**

Sault College, through our partnership with Contact North, offers a number of courses and part-time programs on our main campus using a combination of audio conferencing, video conferencing and e-learning technologies. Learning is facilitated by a teacher via speaker-phone and/or computer, and courses are offered by audio conferencing, video conferencing and e-learning technologies that link the instructor and other students at various locations throughout Northern Ontario.

This is a convenient way to learn for those who require structure, like real-time voice-to-voice interaction and enjoy group learning.

Section A.5 2017-06-12



As a student learning in this way, you will attend regularly scheduled classes on the Sault College main campus in the Gwing. You can call 1-855-901-3425 to learn more. Visit <u>www.contactnorth.ca</u> for the Contact North site nearest you.

### **PART-TIME PROGRAMS**

The Distance Education department offers many part-time programs allowing adult learners to acquire new knowledge and develop new skills. This accreditation is a good investment in future job security. All courses are offered at times that students can schedule around their workday. Visit our website <u>www.saultcollege.ca/distance</u> to see an up-to-date list of the certificates available.

### **ONLINE LEARNING**

Taking courses offered over the Internet provides an excellent opportunity to acquire the training you need at a time that is convenient to your lifestyle. Sault College has collaborated with 22 other Ontario Colleges to develop over 900 courses in a wide range of disciplines. Visit <u>www.ontariolearn.com</u> for a complete listing of online courses. You can register for all <u>Ontariolearn</u> courses at Sault College.

### **INDEPENDENT STUDY**

Sault College offers a number of courses and certificate programs on an Independent Study basis. With this learning method, you can start anytime. Upon registration, a facilitator will be assigned to you for the duration of your course. This mode of learning is truly independent and requires that you be very self-motivated and disciplined.

# Apprenticeship General Information

Section A.6 2017-06-26

SAULT

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# With an increasing number of retirements in the skilled trades, it's becoming even more important to support apprenticeships in Ontario.

Apprenticeship is an on-the-job training program for people who want to work in a skilled trade or occupation and includes learning new skills from skilled journeypersons.

Apprenticeship training provides access to well-paying jobs that demand a high level of skill, judgment and creativity. Apprentices are paid while gaining work experience, and their wages increase with their level of skill.

An apprentice is someone who learns a skilled trade on the job, under the direction of more experienced workers. Apprentices also complete classroom instruction as part of their training. Becoming an apprentice can be an important first step to learning new skills and building a rewarding career. Jobs in the skilled trades pay well, and are interesting and challenging. Plus, you earn while you learn.

Apprentices become skilled workers once they have acquired the knowledge and skills in a trade or occupation and are certified by a provincial or territorial authority. Successful completion of training is recognized with a Certificate of Apprenticeship and a Certificate of Qualification.

Sault College is an approved Training Delivery Agent for a variety of apprenticeship trades with the Ministry of Training, Colleges and Universities. The College delivers apprenticeship classroom training in Motive Power, Electrical, Plumbing, Hairstylist, Cook, Ironworker and Millwright trades. This classroom training is only available to registered apprentices. Learning alongside experienced professionals in your chosen field of study as you get paid for the work you do has unique benefits. You will combine your hands-on training with classroom training as a registered apprentice.

If you are a high school student, the Ontario Youth Apprenticeship Program can help you start training to be an apprentice while completing high school. Please contact your OYAP Coordinator to find out more about the Ontario Youth Apprenticeship Program. Pre-apprenticeship programs also provide opportunities to learn trade-related skills essential to becoming and apprentice. To find out more about Pre-Apprenticeship programs that Sault College is offering, please contact the Registrar's Office at Sault College.

Sault College is one of the largest Training Delivery agents in Northern Ontario and delivers classroom and online training for registered apprentices in the following trades:

- Automotive Service Technician
- Construction & Maintenance Electrician
- Cook
- Hairstylist
- Heavy Duty Equipment Technician
- Industrial Electrician
- Ironworker
- Marine Engine Mechanic
- Parts Technician (on-line)
- Plumbing
- Small Engine Mechanic
- Steamfitter
- Truck & Coach Technician
- Utility Aborist

### **Minimum Academic Requirements**

Applicants must be at least 16 years of age to enter into apprenticeship training. Entrance requirements for apprenticeship programs vary between Grade 10 and 12 depending on the trade, although you will find that most employers and unions require Grade 12 and a solid foundation in Mathematics, English and the Sciences. Your apprenticeship consultant can provide you with the specific qualifications required for apprenticeship training in your chosen trade.

For further information on how you can pursue an apprenticeship, call the toll-free Employment Ontario Hotline at 1-900-387-5656, TTY (telephone service for the deaf) 1-866-533-6339 or you can contact the local Apprenticeship Office in Sault Ste. Marie at 705- 945-6815 or 1-800-236-8817.

You can also visit the local apprenticeship office in Sault Ste. Marie at:

MTCU – Employment Ontario 447 Queen Street, East, 4<sup>th</sup> Floor Sault Ste. Marie, Ontario P6A 1Z5 705-945-6815 or 1-800-236-8817

# **Fees and Expenses**

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

### A. FEES FOR FULL-TIME POST-SECONDARY STUDENTS

The Ontario Council of Regents for Colleges of Applied Arts & Technology draws attention to the fact that tuition fees represent only a small fraction of the total cost of providing post-secondary education through the College, the balance being provided by public funds.

The basis for fee assessment for all programs/courses will be the definition of a full-time student.

A full-time student is an individual who is enrolled in a Ministry of Advanced Education and Skills Development approved program of instruction for at least 70 percent of the student contact hours or 66 2/3 of the courses required for the program in a given semester.

### An academic period is defined as follows:

- SUMMER: May 1 to August 31
- FALL: September 1 to December 31
- WINTER: January 1 to April 30

**Note:** A graduation fee of \$34 will be assessed for each program of study and typically charged in the first semester. Graduation fees help to offset some of the costs involved in conducting convocation ceremonies.

### i) Course Overload Fees

When students register for more courses and credits than are required for their particular program and semester, a course overload occurs. This will result in additional fees being charged. Students are advised to contact the Registrar's Office when adding a course(s) to determine if the addition(s) will result in an "overload" situation.

### ii) Extracurricular Course Fees

Regardless of course load, students enrolling in courses outside of program diploma/certificate requirements will be assessed additional fees.

### iii) Additional Information

- 1. Tuition fees for non-Canadian (international) students may range from \$14,500 \$17,500 per two semester academic year, plus ancillary fees, dependent on program of study.
- 2. Fees not paid by the semester deadline dates are subject to a \$150 late payment fee.
- Full-time students in Co-operative Education programs (including but not limited to Civil Engineering Technician, Natural Environment Technician/Technology – Conservation and Management, Fish and Wildlife Conservation Technician, Forestry Technician - Conservation, Adventure Recreation and Parks Technician, and Culinary Management are required to pay a co-op fee for each academic semester.
- 4. Fees for course overloads and extra-curricular courses will be assessed after the "add deadline" in each semester (see Key Dates Calendar).
- 5. A 100% level is the total number of program credits scheduled for a given program and level in a particular semester.

Section A.7 2018-04-02



### **B. FEES FOR PART-TIME POST-SECONDARY STUDENTS**

A part-time student is one with an academic load of less than 70% of the student contact hours and fewer than 66 2/3 of the required course.

Part-time tuition fees for most post-secondary programs are calculated on the basis of approximately \$7.50 per credit hour x 15 weeks (subject to change at Sault College's discretion). Some programs may have a higher part-time calculation rate. Tuition fees for part-time students are due in full at the time of registration.

### C. FEES FOR LOCKERS

- 1. All students will pay a locker registration fee as part of their annual schedule of fees.
- 2. The Locker Assignment information is available on the Sault College website.
- 3. Should a student take possession of any other locker than the one assigned, the lock and contents will be removed. An administration fee will be charged to reclaim locker contents.
- 4. The College bears no liability for the contents or personal property stored in the locker.
- 5. The student is responsible for the replacement and/or repair of the locker as a result of damage or misuse of College property.
- 6. Should a student withdraw from the College at any time, the locker must be vacated immediately to ensure adequate availability of lockers for incoming students.
- In order to allow for summer cleaning and maintenance of lockers, all contents must be removed by May 1. Any contents left in the lockers will be considered abandoned and discarded without further communication to the student. Lockers may be chosen after August 20<sup>th</sup>.

### D. FEES FOR PARKING

Student vehicles, including motorcycles, must be parked in designated student parking lots. All parking lots are controlled. Parking in roadways, fire routes, and emergency and loading zones is prohibited. Vehicles parked in these areas will be ticketed and/or towed away at the owner's expense. Information regarding parking is available on the Sault College website.

Accessible parking spaces are available. Vehicles accessing these parking spaces must display the appropriate accessible permit or licence plates or are subject to a \$300 parking ticket.

In the interests of our neighbours' safety, students are asked not to park on nearby streets. Please use College parking facilities.

Bicycles, while exempt from parking charges, must be parked in bicycle racks situated around the College grounds.

### **E. TYPICAL EXPENSES**

The costs listed below are approximations and may vary, depending on the type or length of the program, accommodations, and spending habits. The budget is based on one academic year, typically 30 weeks.

	Home	On Campus	Off Campus
Tuition and Ancillary Fees	\$4,573*	\$4,573*	\$4,573*
Books and Supplies	\$1,500	\$1,500	\$1,500
Housing	\$0	\$5,350 - 6,950	\$4,200 - 6,400**
Food / Meal Plan	\$0	\$3000 - 3,700***	\$2,500 - 3,600
Internet, Cable, Phone & Laundry	\$480 (phone)	\$480 (phone)	\$2,500 - 3,600
Local Transportation	\$0 - \$360****	\$0 - \$360****	\$0 - \$360****
Miscellaneous	\$2,500	\$2,500	\$2,500
Total	\$9,053-\$9,413	\$17,403-\$20,063	\$17,773-\$22,533

Above Represents 2018-2019 academic year. Fees subject to change.

\* Domestic student fees only. Some programs cost more. Refer to the website for specific tuition fees.

\*\* Some off-campus housing options require a 12 month lease, which will increase the above mentioned costs.

\*\*\* Mandatory Meal Plan.

\*\*\*\* Local transportation for two semesters is optional.

### F. REFUND OF FEES FOR FULL-TIME POST-SECONDARY STUDENTS

Refund of fees are calculated based on the refund schedule and the effective date indicated on the Withdrawal Form. Students must initiate the withdrawal procedure by completing the Withdrawal Form which is available in the Chair's Office.

The College has a late payment fee of \$150 which is non-refundable.

Fee Schedules for non-post-secondary programs are available from the Registrar's Office.

The \$34 graduation fee is non-refundable.

### G. REFUND SCHEDULE

If full-time students officially withdraw on or before Day 10 of the semester as specified in the Key Dates Calendar, all fees paid will be refunded, less the \$100 non-refundable administration fee. Please note this administration fee differs for international students.

The program start dates are listed in the Key Dates Calendar, which is provided to all students at <u>www.saultcollege.ca/importantdates</u>

Students officially withdrawing after Day 10 of the semester (as specified in the Key Dates Calendar) will not be eligible for a refund of fees for that semester. However, all fees paid in advance for future semester(s) will be refunded.

### H. REFUND OF FEES FOR PART-TIME POST-SECONDARY STUDENTS – DAY CLASSES

A \$15 registration fee is included in the total fees payable and is non-refundable. Also, any course specific supply fee is not refundable. Students who are enrolled in a continuing education course(s) must officially withdraw at the Registrar's Office before the second scheduled class to be eligible for a refund. The refund will not include the registration fee of \$15. If the course has only one class, the withdrawal request must be made before the beginning of that scheduled class.

### I. TUITION AND EDUCATION CREDIT CERTIFICATE

The Tuition and Education Credit Certificate (T2202A) is a form that includes months of full-time or part-time attendance and tuition fees paid.

The certificate is available on the Student Portal to post-secondary, apprenticeship, adult training and continuing education students in late February of each year.

Tuition fees must be paid by December of each year to ensure that the tuition receipt section of the certificate will be issued by February of the year following payment.

### 2018/2019 ANNUAL FEE SCHEDULE

\* For Full-time Post-secondary (Canadian) Students. Tuition Fees subject to change.

- \*\* For Full-Time Post-secondary (International ) Students. Tuition Fees subject to change.
- \*\*\*Assessed once per program of study.

	Canadian	International
Tuition Fee	\$2,943 - \$9,471*	\$14,297 - \$21,564**
(Includes \$100.00 Non-Refundable		
Administration Fee)		
Alumni Fee	\$19	\$19
Athletic Fee	\$162	\$162
Campus One Card Fee	\$15	\$15
Student Financial Assistance Fee	\$15	\$15
Health and Dental Insurance Fee	\$190	
International Health Insurance		\$650
Health Support and First Aid Fee	\$70	\$70
Locker Fee	\$15	\$15
Employment Services Fee	\$45	\$45
Student Trust Fund	\$184	\$184
SCSU Fee	\$158	\$158
Technology Fee	\$120	\$120
Student Success Fee	\$55	\$55
Graduation Fee***	\$34	\$34
WUSC	\$5	\$5
(World University Service of Canada)		
Total	\$4,030 - \$10,558	\$15,844 - \$23,111

Please Note - Some Programs have additional Program Related Fees:

- Co-op Education Fee, \$150 per academic semester in designated co-op programs.
- Canadian Nursing Students' Association Fee, \$10 is assessed annually to students who are in the Practical Nursing and Collaborative Bachelor of Science in Nursing programs.

The following Program Related Fees are subject to change:

- Field Camp Fee, \$132 to \$426 is assessed to students who attend a Field Camp as a program requirement in the School of the Natural Environment. Students may be required to attend up to three of these Field Camps depending upon their program.
- Equipment Lending Fee, \$200 is assessed annually to students who are in the Digital Film Production program.
- Food Lab Fee, \$450 is assessed annually to students in the Culinary Management and Culinary Skills Chef Training programs.
- Flight Training Support Fee, \$200, is assessed annually to students enrolled in Aviation Technology.

Fees Schedules for non-post-secondary programs are available from the Registrar's Office.

You are encouraged to go online to view the Program Fact Sheet associated with your program of choice.

"As our economy transforms to the new economic engines and new job opportunities of science and technology, Sault College is taking leadership in cultivating talent, skills, and knowledge in our young people and our workforce that this city requires for the future."

- Bruce Strapp, former CEO, SSM Economic Development Corporation

# How to Pay

Section A.8 2017-06-28

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

Ask us how we can help you with ways to pay for college. Call Financial Services at 705-759-2554, ext. 2300 to learn more.

Sault College welcomes a variety of fee payment methods:

### **ONLINE PAYMENT – CREDIT CARD PAYMENT**

Students may pay online though the **Student Portal**. Go to "My Records" and select "Online Tuition Payment". Your fee statement will be available and you will be able to pay with either Visa or MasterCard. Please note that this option is for tuition deposits and full payments; partial fee payments are not available through the online payment option.

### **DIRECT DEPOSIT – BANK ACCOUNT PAYMENT**

Through your preferred bank account you can add Sault College as a "payee" and arrange a direct deposit or payment. You will require your Sault College 8-digit student identification number for this option.

### FINANCIAL SERVICES OFFICE

Students are welcome to pay in-person with Financial Services at Sault College (Location: Essar Hall, M1200). Hours of operation are Monday to Friday, 8:30 a.m. – 4:30 p.m. If you are paying in-person, you may pay via Cash, Debit, Visa, MasterCard, MoneyOrder, and/or Cheque.

### **TELEPHONE – CREDIT CARD PAYMENT**

Students have the option to call 1-705-759-2554 ext. 2300 to arrange for payment with Visa or MasterCard. Hours of operation are Monday to Friday, 8:30 a.m. – 4:30 p.m.

### STUDENT FINANCIAL ASSISTANCE – FINANCIAL AID OFFICE

If you are eligible, you may apply for an Ontario Student Assistance Program (OSAP) Loan. Details about student loans and eligibility criteria are available at **ontario.ca/osap**.

Students are also welcome to contact the Sault College Financial Assistance Office for guidance regarding possible financial support options: visit in-person at M1200 or call 1-705-759-2554 ext. 2704. Hours of operation are Monday to Friday, 8:30 a.m. – 4:30 p.m.

Please refer to the Important Dates - Academic Calendar of Events for more dates and deadlines: www.saultcollege.ca/importantdates

For more information on fees and the refund policy, please visit: www.saultcollege.ca/fees.

# Academic Upgrading

# Section B.1 6/2/2020

Certificate (8220) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

### **PROGRAM OVERVIEW**

Do you want to study with Sault College but haven't finished your high school diploma?

Are you are missing a specific Math, English or Science course required to meet College admission requirements?

Have you been out of school for a number of years and wish to refresh your skills prior to enrolling in a college program?

The Academic Upgrading Program may be the perfect choice for you! We offer you high school course equivalents for College admission in English, math, physics, chemistry or biology courses. You can also refresh your skills to build confidence and preparation for college studies, and even earn your high school equivalency certificate (the ACE certificate) for entrance into college or apprenticeship programs throughout Ontario.

As an Academic Upgrading student, your course work is personalized to your skills and goals. Courses are delivered in both traditional and self-paced settings. Our program offers daytime and occassional evening options, and we have year-round intake. All courses typically run September through April, and summer courses in math, English and the sciences run May through August.

Our programs are tuition-free for students meeting our registration requirements.

For more information, contact the Academic Upgrading office at 705-759-2554, x2433 or academicupgrading@saultcollege.ca.

### **ADMISSIONS**

### MINIMUM ACADEMIC REQUIREMENTS

Applicants must be a minimum of 19 years of age (some exceptions may apply)

Applicants must have a minimum LBS Level 3 in English or math as determined by the course placement test results to enrol in the Academic Upgrading Program. Students must place at the ACE level either via placement test or via completion of Level 5 coursework to take ACE level courses.

Applicants must be able to commit to attending classes and completing homework assignments

Following placement and enrolment in the program, applicants must complete a training plan with the coordinator.

### **ADMISSION PROCEDURES & SELECTION PROCESS**

All applicants interested in registering for the Academic Upgrading Program must first complete placement testing in English and/or math. Your course placement allows us to determine the level at which you will start. You may be eligible to start at the ACE-level (Grade 12 level) in English and/or math, or you may be

required to complete preparatory coursework at a different level within our program prior to enrolling in our ACE courses.

### **OTHER INFORMATION**

### Online substitutes for Academic and Career Entrance courses are available.

### What ACE courses should I take?

This is dependent upon what postsecondary or Apprenticeship program you want to enroll in. You can either take courses necessary to earn the ACE Certificate (grade 12 equivalency) or you may take only the courses you need to meet the prerequisites for admission to Sault College (refer to the Sault College academic calendar and/or speak to the training plan coordinator for more information on minimum academic requirements.)

Most post-secondary programs at the College require Grade 12 English or equivalent. Our ACE Communications (English) meets that requirement. If you don't have a grade 12 English under your belt, you will need to complete ENG 94 ACE Communications. Many programs require a certain level of math as well, and some of the health-related programs require biology and chemistry.

If you are looking for a grade 12 equivalency certificate, similar to a GED, you will want to take the ACE Certificate route. You qualify to receive an ACE Certificate by successfully completing four (4) ACE-level courses: ENG 94: ACE Communications, one ACE math course and any two other ACE courses (a second ACE math, computers, a science course or foundations college/career). Most students take ENG 94, CPT 93 (computers), SEL 93 (foundations) and an ACE math course to earn their certificate if they do not need additional math or science for their programs of study. To determine which courses are best for you, speak with the training plan coordinator.

**Dual-Enrolment Option**: Qualified ACE-Level students enrolled in Acadenic Upgrading at Sault College can take a tuition-free, college-level course that would count towards a certificate or diploma! This is a great opportunity for students to sample a college course offering without having to take a full load. Furthermore, by successfully completing a college course required for the student's intended college program, the student may have a reduced course load in the first semester of full-time postsecondary enrolment.

**Modes of instruction**: Self-paced, self-directed learning in a classroom setting; traditional instructor-led classroom setting; computer-assisted and computer-based learning.

### **PROGRAM OF STUDY**

SEMESTER 1 ENG 94-8 ACE Communications Electives:

- BIO 94-5 ACE Biology
- CHM 94-9 ACE Chemistry
- CPT 92-3 Introduction to Keyboarding
- CPT 93-4 ACE Computers
- MTH 94-5 ACE Core Mathematics
- MTH 95-5 ACE Business Mathematics
- MTH 96-5 ACE Technical Mathematics
- MTH 97-5 ACE Apprenticeship Mathematics
- PHY 94-8 ACE Physics
- SEL 93-2 ACE Foundations for College and Career

Courses are selected based on an individual's academic goals and course placement. To earn an Academic and Career Entrance certificate (grade 12 equivalency), a student must successfully complete ACE Communications, an ACE Math and two (2) elective courses.

### **Course Descriptions**

### Semester 1

### ACE Communications (ENG 94) (8 credits)

Successful learners must be effective communicators in academic, personal and work settings. Effective communicators are able to express themselves well when presenting and defending ideas and opinions by using oral, visual and written forms of communications. Graduates who achieve the learning outcomes will have well-developed communication skills that will prepare them for success in a variety of college post-secondary programs.

# Academic Upgrading



705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# 

### **PROGRAM OVERVIEW**

### Literacy and Basic Skills (LBS)

- Strengthen English, math and computer skills necessary for success in the workplace
- Upgrade or refresh your skills prior to entering a college program
- Prepare for the Academic and Career Entrance (ACE) program

The LBS program provides students with an opportunity to strengthen their English, math and computer skills in order to prepare for employment or enter the ACE (Academic and Career Entrance) grade 12 college equivalent program.

Our program offers daytime and occasional evening options, and we have year-round monthly in-takes. All courses typically run September through April, and summer courses in Math, English and the Sciences run May through August.

Placement in the LBS program is based on assessment results. Students who qualify for enrolment in the LBS program will also work with the coordinator to establish a training plan with academic and career goals.

Faculty members create a supportive classroom learning environment where students are encouraged to learn at their own pace.

For more information, contact the Academic Upgrading office at 705-759-2554, x2433 or <u>academicupgrading@saultcollege.ca</u>.

### **ADMISSIONS**

### MINIMUM ACADEMIC REQUIREMENTS

Applicants must be a minimum of 19 years of age (some exceptions may apply)

Applicants must have a minimum LBS Level 3 in English and math as determined by the course placement test results to enrol in the Academic Upgrading Program. Students must place at LBS Level 5 either via placement test results or via completion of LBS Level 4.

Applicants must be able to commit to attending classes and completing homework assignments

Following placement and enrolment in the program, applicants must complete a training plan with the coordinator.

### **OTHER INFORMATION**

The courses you take are dependent upon your placement test results and completion of pre-requisite courses; therefore, you may have Math and Communication courses at different levels.

Modes of instruction: Self-paced, self-directed learning in a classroom setting; traditional instructor-led

classroom setting; computer-assisted and computer-based learning.

### **PROGRAM OF STUDY**

### **SEMESTER 1**

ENG045-7 Communications 045 MTH050-5 Mathematics 050 Electives:

- BIO 94-5 ACE Biology
- CHM 94-9 ACE Chemistry
- CPT 92-3 Introduction to Keyboarding
- CPT 93-4 ACE Computers
- ENG050-4 English for College Entrance
- SEL 93-2 ACE Foundations for College and Career

### **Course Descriptions**

### Semester 1

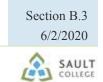
### Communications 045 (ENG045) (7 credits)

This course develops communication skills in reading, vocabulary development and writing. It introduces skills in paragraph writing. It also reinforces and further develops communication skills in reading comprehension, spelling and grammatical principles.

### Mathematics 050 (MTH050) (5 credits)

This developmental course focuses on basic algebra, solving equations, and basic probability and statistics. Integers, rational numbers, exponents, polynomials, equations, graphing and various aspects of statistics and their application and display are featured.

# Steamfitting



705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

### **PROGRAM OVERVIEW**

The invention of the steam engine in the 1800s began the Industrial Revolution. Virtually every industry was powered by steam. Equipment was installed and maintained by steamfitters.

Today's steamfitters work with all forms of heat energy, from installing piping systems in power generation plants to hot water heating in residences. Virtually all piping systems that move liquids or gases fall into the scope of the steamfitter's work.

The in-school steamfitting theory and practical component of this program cover general piping practices, hot water and steam heating (design and layout), pumps, refrigeration and air conditioning, fire protection systems, irrigation systems, hydraulic piping, medical gas piping, cross connection and backflow prevention and construction safety. All training is delivered in modern shops and classrooms at Sault College.

### **CAREER PATHS**

Graduates can become employed in areas related to the industrial environment, construction sites, residential contracting, industrial maintenance, utilities, and commercial maintenance.

### **PROGRAM OF STUDY**

### Basic (6230)

MET621 - 3 Welding STM660 - 3 Workplace Safety, Rigging and Hoisting I STM662 - 8 Piping and Joining Techniques I STM664 - 8 Steamfitting Systems I STM666 - 4 Applied Trade Calculations I STM668 - 4 Trade Documentation I

### Intermediate (6231)

MET721 - 3 Welding STM760 - 6 Pipe Fabrication II STM762 - 15 Steamfitting Systems II STM764 - 3 Applied Trade Calculations II STM766 - 3 Trade Documentation II

### Advanced (6232)

MET822 - 3 Welding STM860 - 6 Fluid Power Systems III

### **Course Descriptions**

### Basic (6230)

### Welding (MET621) (3 credits)

This course provides apprentices with a combination of knowledge and practical skill in the operation and safe use of oxy-acetylene flame cutting and fusion welding equipment. Trade specific skills are developed through the preparation and fusion welding of lap, tee and groove weld joints on both flat gage metal and small diameter pipe. Personal and shop safety are stressed throughout the course and are reinforced by means of an independent reading assignment complete with a final theory test.

### Workplace Safety, Rigging and Hoisting I (STM660) (3 credits)

This course provides the apprentice with a basic introduction to the Occupational Health and Safety Act and Regulations and the requirements for basic rigging fundamentals.

### Piping and Joining Techniques I (STM662) (8 credits)

This course will provide the apprentice with an opportunity to apply theoretical knowledge learned in the classroom to safely construct a piping arrangement using several different piping materials and pipe joining methods.

### Steamfitting Systems I (STM664) (8 credits)

Steamfitting Systems I curriculum provides the apprentice with an introduction to various heating systems, hot water boilers, boiler control, pumps, piping material for heating systems and the selection and use of different types of valves.

### Applied Trade Calculations I (STM666) (4 credits)

This course will provide the apprentice with skills in basic mathematics, offset calculations, area calculations and percentage, ratio and proportion calculations which will be useful in other courses for Level I Steamfitter.

### Trade Documentation I (STM668) (4 credits)

Trade Documentation gives the apprentice an introduction to drafting equipment and drawings which are used to transmit information to trades people.

### Intermediate (6231)

### Welding (MET721) (3 credits)

This course provides apprentices with a combination of knowledge and practical skills in the operation and safe use of shielded metal arc welding equipment. Trade specific skills are developed through the preparation and welding of lap, tee and groove weld joints on steel plate and pipe in the flat and horizontal position. Safe work practices and weld quality are stressed throughout the course and are reinforced by means of an independent reading assignment complete with a final theory test.

### Pipe Fabrication II (STM760) (6 credits)

Pipe Fabrication II requires the apprentice to apply theoretical knowledge in layout of piping necessary for fabrication of fittings required in the construction of a shop project to specific measurements with accuracy.

### Steamfitting Systems II (STM762) (15 credits)

Steamfitting Systems II provides basic knowledge on zone controls, low pressure steam systems, high pressure steam systems, heat transfer equipment and basic electrical fundamentals.

## Applied Trade Calculations II (STM764) (3 credits)

This course will provide the apprentice with knowledge required for calculations of volumes, angles, pricing and Boyle's law.

## Trade Documentation II (STM766) (3 credits)

This course is designed to help the apprentice with layout of templates for fabricated fittings, an understanding isometric drawing and the importance of sleeve drawings.

### Advanced (6232)

### Welding (MET822) (3 credits)

This course provides apprentices with a combination of knowledge and practical skills in the operation and safe use of shielded metal arc welding equipment. Trade specific skills are developed through the preparation and welding of lap, tee and groove weld joints on steel plate and pipe in the flat and horizontal position and vertical position. Safe work practices and weld quality are stressed throughout the course and are reinforced by means of an independent reading assignment complete with a final theory test.

## Fluid Power Systems III (STM860) (6 credits)

This course will provide the apprentice with basic knowledge and understanding of Hydraulic and Pneumatic systems drawings, components, piping, piping supports, valves, and fluids .

## Steamfitting Systems III (STM862) (15 credits)

Steamfitting Systems III will provide the apprentice with basic knowledge in various piping systems which may be installed in buildings such as medical gas, process piping, fire protection piping, Hydronic heating, refrigeration and air conditioning and the use of heat pumps.

## Trade Documentation III (STM864) (6 credits)

This course will serve to further enhance the apprentices knowledge of drawing and drawing fundamentals, contract documents, specifications, scheduling and organizational skills.





## **PROGRAM OVERVIEW**

Sault Colleges Cook program teaches you everything you need to know to develop a career as a chef.

Cook is a 6,000 hour apprenticeship that has a 12 week basic and 12 week advanced in-school training requirement. Students have the opportunity to learn about classical, contemporary & short-order food preparation through lectures, food demonstrations and lab work. Students will also learn about food theory, nutrition, sanitation, menu planning and kitchen management.

Upon successful completion of your studies you will have the necessary tools to work within fine dining establishments throughout the world.

#### **CAREER PATHS**

Graduates of the cook program may find employment as a chef assistant, short-order cook, sous chef, or first cook. Graduates may find employment within restaurants, catering services, resorts, hotels, health care facilities, cruise lines, private clubs and industrial kitchens.

### **PROGRAM OF STUDY**

# **Basic (6320)**

- KAP200 1 Sanitation Safety and Equipment
- KAP201 1 Nutrition and Wellness
- KAP202 4 Culinary Math and Computer Apps for the Trade
- KAP203 10 Culinary Techniques Basic
- KAP204 4 Culinary Food Production
- KAP205 1 Bake Theory
- KAP206 4 Techniques of Baking Basic
- KAP207 5 The Theory of Food

# Advanced (6321)

- KAP400 2 Menu Planning
- KAP401 5 Gastronomy & Food Sustainability
- KAP402 5 Culinary Cost Control
- KAP403 10 Culinary Techniques Advanced
- KAP404 4 Contemporary Food Production
- KAP405 3 Food Composition and Plating Techniques
- KAP406 4 Baking Techniques Advanced

#### **Course Descriptions**

#### Basic (6320)

#### Sanitation Safety and Equipment (KAP200) (1 credits)

In this course students will learn about personal hygiene, sanitation code requirements, and sanitary practices in storing, handling and cooking foods. Government Health regulations, safety in handling kitchen equipment, tools and First Aid are also covered. Each student will complete the Algoma Public Health's Safe Food Handler's Certificate Program.

#### Nutrition and Wellness (KAP201) (1 credits)

Nutrition plays a vital role in menu selection for today?s restaurant clientele. In this course, students will gain a foundational understanding of nutrition as applied to dietary concerns, menu selection and client?s needs. Students will also acquire knowledge of basic nutrients, food labeling, nutritional principles and analysis and the application of these to recipes and menu development.

#### Culinary Math and Computer Apps for the Trade (KAP202) (4 credits)

This course will provide students with the essential numeric and computer skills required to perform effectively and efficiently within the trade. Students will apply basic math skills including fractions, decimals and percent and perform calculations pertaining to standard units of measure, unit conversion, portion and recipe costing. Microsoft office will be used in the creation of spreadsheets, recipe portfolios, power point presentations and to perform basic word processing tasks as they relate to the food industry.

#### Culinary Techniques - Basic (KAP203) (10 credits)

Building a sound foundation in culinary skills is essential when preparing to enter the culinary industry. This course is an introduction to the application and development of fundamental cooking theories and techniques. Students will develop solid rudimentary culinary techniques and practices through viewing a variety of food demonstrations and recreating these within a lab setting. Topics of study include tasting, kitchen equipment, knife skills, classic vegetable cuts, stock production, thickening agents, soup preparation, mother and derivative sauces, and breakfast cookery. This course also introduces students to fundamental concepts and techniques of basic protein, starch and vegetable cookery.

#### Culinary Food Production (KAP204) (4 credits)

Culinary Food Production will introduce students to multi-course menus with emphasis placed on batch cooking as executed in an la carte-style service. This hands-on culinary lab will teach students to work and communicate effectively in a team setting. Students will have three hours to complete mise en place, create and package current culinary meals, to be featured in our program store Gourmet 2 Go. This course provides an excellent opportunity to practice and further develop the culinary skill set. Students will hone critical thinking and problem solving skills by executing individual work plans that exercise proper time management, demonstrate the ability to multi-task and collaborate with classmates for a successful restaurant service.

#### Bake Theory (KAP205) (1 credits)

This course is designed to provide students with essential knowledge of baking principles. Students will explore ingredients, techniques and procedures used within the baking industry. Topics of study will include measurements and formulas, functions of baking ingredients, yeast doughs, quick breads, pastry dough and cake varieties.

#### Techniques of Baking - Basic (KAP206) (4 credits)

This course is designed to provide students with the essential knowledge, skills and techniques of baking

and pastry arts. Learning is comprised of hands-on practical baking labs that introduce students to the fundamental ingredients, techniques and procedures used in the bake industry. A series of in-lab baking demonstrations will emphasize the importance of understanding the function of ingredients in a range of basic baked products. With knowledge acquired from these demonstrations, students will produce assorted yeast products, quick breads, cookies, choux paste, puff pastry, sponge based pastries, custards, creams, and a variety of pies, tarts and flans.

# The Theory of Food (KAP207) (5 credits)

Having a theoretical knowledge base of professional culinary terminology, food principles and common kitchen practices is essential for every cook. Students will learn to identify different quality food ingredients, explore principles of cooking, recognize a variety of cooking methodologies and examine food flavour pairings. Topic areas to be explored are: kitchen safety and sanitation, stocks, soup, sauces, breakfast, salads, sandwiches, hors d?oeuvres, non-alcoholic beverages, vegetables, potatoes, grains, pasta, legumes, poultry, meat products, fish and shellfish.

# Advanced (6321)

# Menu Planning (KAP400) (2 credits)

The ability to create well-balanced menus for a variety of occasions that meet the diverse needs of customers, and that are operationally functional and profitable is paramount to the success of any business. This course will highlight the basic principles of developing menus that reflect proper descriptive terminology and comply with truth in menu guidelines. Students will examine factors to consider when planning menus, prepare menus, create standardized recipes and calculate recipe costs and menu pricing.

# Gastronomy & Food Sustainability (KAP401) (5 credits)

Food is critical to the culture of society. In this course, students will study the social, historical and cultural connections to how society interacts with food by investigating the impact of lifestyle, commerce and politics in key global regions. Students will learn how agriculture, religion, history and environmental sustainability influence the characteristics of a culture and its food. Today?s customers value health and wellness. The food service industry must respond with menu options that highlight nutritious, ethically sourced, sustainable products. Students will develop the knowledge to successfully identify and create menu options that meet the diverse needs of today?s society.

# Culinary Cost Control (KAP402) (5 credits)

Whether you manage or own a restaurant, operate a catering business or embrace the food truck craze, there are fundamental management skills that apply to all foodservice operations. This essential course introduces students to management principles and the theoretical applications of food, beverage and labour cost controls. Students will examine various aspects used within the industry to evaluate, monitor and maintain appropriate control policies and procedures through the various functioning centres of purchasing, receiving, storing and issuing. Additionally, students will develop standard recipes and requisitions, practice menu engineering, examine break-even analysis and perform yield tests, cost/sale and inventory calculations.

# Culinary Techniques - Advanced (KAP403) (10 credits)

Building on Culinary Techniques I and in preparation for successful employment in today?s food service industry, students will broaden their culinary skills at an advanced level focusing upon concepts and techniques of protein, starch and vegetable cookery. Students will observe a series of cooking demonstrations and prepare and execute work plans within the culinary lab that reflect an advanced skill competency.

#### Contemporary Food Production (KAP404) (4 credits)

Contemporary food production will further develop the skills, techniques and kitchen practices learned within Culinary Food Production. This hands-on culinary lab will expose students to the advanced styles of cooking and cooking techniques found in a variety of cuisines. Students will further develop their ability to organize an assigned station based on preparation methods while focusing on the production of advanced menu items, plate presentations and cooking techniques. Second year students will assist in the supervision of production and food presentation for the supply of food in our program store Gourmet 2 Go.

## Food Composition and Plating Techniques (KAP405) (3 credits)

The ability to quickly and accurately assess resources, plan and create contemporary cuisine is a crucial skill. Employees working within the culinary industry typically have the opportunity to develop daily feature menu items. This advanced level course will work off the premise of a black box challenge. Students will work with minimal supervision to showcase their developed culinary skill sets by preparing, plating and presenting modern dishes that demonstrate sound culinary knowledge, judgement and technique.

## Baking Techniques Advanced (KAP406) (4 credits)

This course will continue to develop and expand students baking and pastry knowledge and practical techniques through a series of theoretical lessons, demonstrations and laboratory classes. Students will build upon their skills to produce sophisticated finished products and contemporary plating techniques and designs. Students will produce and plate frozen confections, cheesecake, souffl?, sabayon, cakes, icings, petit fours, fruit coulis and purees, chocolates and chocolate desserts.

# Construction and Maintenance Electrician

Section B.5 6/2/2020

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

This program meets the in-school training requirements of the Electrical Construction and Maintenance Apprenticeship program administered by the Ministry of Training, Colleges and Universities.

Students gain theoretical and practical training to complement on-the-job learning.

The training consists of a basic course of eight weeks duration and an intermediate and advanced course of ten weeks.

# **CAREER PATHS**

Electrical sales, electrical estimating, electrical utilities, or residential, commercial and industrial installation, and maintenance.

# **PROGRAM OF STUDY**

# **Basic (6520)**

- ELR620 8 Electrical Theory Level 1
- ELR621 5 Electronics Level 1
- ELR622 3 Instrumentation Level 1
- ELR623 4 Canadian Electrical Code Level 1
- ELR624 6 Installation Methods Level 1
- ELR625 4 Prints Level 1

# Intermediate (6521)

- ELR720 8 Electrical Theory Level 2 ELR721 - 4 Electronics - Level 2 ELR722 - 4 Instrumentation - Level 2 ELR723 - 4 Canadian Electrical Code - Level 2 ELR724 - 4 Installation Methods - Level 2 ELR725 - 3 Prints - Level 2
- ELR726 3 Monitoring & Communication Systems

# Advanced (6522)

ELR820 - 6 Electrical Theory - Level 3 ELR821 - 6 Electronics - Level 3 ELR822 - 4 Instrumentation - Level 3 ELR823 - 3 Canadian Electrical Code - Level 3 ELR824 - 8 Installation Methods - Level 3 ELR825 - 3 Prints - Level 3

## **Course Descriptions**

#### Basic (6520)

#### Electrical Theory - Level 1 (ELR620) (8 credits)

This course introduces the student to basic DC electrical theory. OHM's Law, series, parallel, series/ parallel circuits are studied. Magnetic theory is also covered.

#### Electronics - Level 1 (ELR621) (5 credits)

This course introduces the student to semiconductors and their applications. Simple digital logic devices and circuits are also covered.

#### Instrumentation - Level 1 (ELR622) (3 credits)

This course is an introduction to instrumentation symbols and terminology. Temperature and pressure measurement will be studied in detail.

#### Canadian Electrical Code - Level 1 (ELR623) (4 credits)

This course introduces the student to the Canadian Electrical Code with a focus on the general sections of the code and residential wiring practices.

#### Installation Methods - Level 1 (ELR624) (6 credits)

This is a hands-on course focusing primarily on residential wiring practices. Installation methods applying to common electrical cables and conduits are also covered.

#### Prints - Level 1 (ELR625) (4 credits)

This course introduces the student to print reading and interpreting specifications for residential (single-dwelling) construction projects. The student will obtain information from architectural, mechanical and electrical drawings and identify related building and electrical codes.

#### Intermediate (6521)

#### Electrical Theory - Level 2 (ELR720) (8 credits)

This course covers magnetism, direct current machines, alternating current circuit theory and single phase transformers.

#### Electronics - Level 2 (ELR721) (4 credits)

This course introduces the student to rectifier based power supplies, thyristors and field effect transistors. Operational amplifiers and their applications are also covered. Theory is supported by appropriate labs.

#### Instrumentation - Level 2 (ELR722) (4 credits)

This course will introduce the student to instrumentation theory relating to the measurement of pressure and flow in industrial processes. The theory is supported by appropriate labs.

#### Canadian Electrical Code - Level 2 (ELR723) (4 credits)

This course primarily covers sections of the Canadian Electrical Code dealing with commercial wiring practices. It is a continuation of Canadian Electrical Code - Level 1.

#### Installation Methods - Level 2 (ELR724) (4 credits)

This lab oriented course will cover basic connection and control of alternating current and direct current

motors.

#### Prints - Level 2 (ELR725) (3 credits)

This course covers interpretation of construction drawings and specifications relating to commercial construction projects. It focuses on electrical installation.

#### Monitoring & Communication Systems (ELR726) (3 credits)

This course introduces the student to monitoring and communication systems, such as fire alarm systems, nurse call systems and paging systems. Related codes and standards are also covered. Theory is supported by appropriate labs.

### Advanced (6522)

## Electrical Theory - Level 3 (ELR820) (6 credits)

This course covers three phase alternating current circuit theory, poly-phase transformers and alternating current motors and generators.

#### Electronics - Level 3 (ELR821) (6 credits)

This course introduces the student to solid state motor drives for controlling alternating and direct current motors. Theory is supported by appropriate labs.

#### Instrumentation - Level 3 (ELR822) (4 credits)

This course will introduce the student to instrumentation theory relating to pneumatic systems. This is followed by control system theory and the principles of proportional, integral and derivative control. The theory is supported by appropriate labs.

## Canadian Electrical Code - Level 3 (ELR823) (3 credits)

This course primarily covers sections of the Canadian Electrical Code dealing with industrial wiring practices. It is a continuation of Canadian Electrical Code - Level 2.

#### Installation Methods - Level 3 (ELR824) (8 credits)

This lab oriented course will cover connection and testing of transformers, wound rotor induction motors, synchronous motors and two speed squirrel cage motors. Installation and programming of programmable logic controllers is also covered.

#### Prints - Level 3 (ELR825) (3 credits)

This course covers interpretation of construction drawings and specifications relating to industrial construction projects. It focuses on the electrical installation.

# Industrial Electrician



705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

This program meets the in-school training requirements of the Industrial Electrician Apprenticeship program administered by the Ministry of Training, Colleges and Universities.

Students gain theoretical and practical training to complement on-the-job learning.

The training consists of a basic course of eight weeks duration and an intermediate and advanced course of ten weeks each.

# **CAREER PATHS**

Apprentices in the Industrial Electrician trade plan, assemble, install, repair, and maintain electrical equipment in industrial installations.

# **PROGRAM OF STUDY**

# **Basic (6540)**

- ELR620 8 Electrical Theory Level 1 ELR621 - 5 Electronics - Level 1
- ELR622 3 Instrumentation Level 1
- ELR623 4 Canadian Electrical Code Level 1
- ELR624 6 Installation Methods Level 1
- ELR625 4 Prints Level 1

# Intermediate (6541)

ELR720 - 8 Electrical Theory - Level 2 ELR721 - 4 Electronics - Level 2 ELR722 - 4 Instrumentation - Level 2 ELR723 - 4 Canadian Electrical Code - Level 2 ELR724 - 4 Installation Methods - Level 2 ELR725 - 3 Prints - Level 2 ELR726 - 3 Monitoring & Communication Systems

# Advanced (6542)

ELR820 - 6 Electrical Theory - Level 3 ELR821 - 6 Electronics - Level 3 ELR822 - 4 Instrumentation - Level 3 ELR823 - 3 Canadian Electrical Code - Level 3

# **Course Descriptions**

#### Basic (6540)

#### Electrical Theory - Level 1 (ELR620) (8 credits)

This course introduces the student to basic DC electrical theory. OHM's Law, series, parallel, series/ parallel circuits are studied. Magnetic theory is also covered.

#### Electronics - Level 1 (ELR621) (5 credits)

This course introduces the student to semiconductors and their applications. Simple digital logic devices and circuits are also covered.

#### Instrumentation - Level 1 (ELR622) (3 credits)

This course is an introduction to instrumentation symbols and terminology. Temperature and pressure measurement will be studied in detail.

#### Canadian Electrical Code - Level 1 (ELR623) (4 credits)

This course introduces the student to the Canadian Electrical Code with a focus on the general sections of the code and residential wiring practices.

#### Installation Methods - Level 1 (ELR624) (6 credits)

This is a hands-on course focusing primarily on residential wiring practices. Installation methods applying to common electrical cables and conduits are also covered.

#### Prints - Level 1 (ELR625) (4 credits)

This course introduces the student to print reading and interpreting specifications for residential (single-dwelling) construction projects. The student will obtain information from architectural, mechanical and electrical drawings and identify related building and electrical codes.

#### Intermediate (6541)

#### Electrical Theory - Level 2 (ELR720) (8 credits)

This course covers magnetism, direct current machines, alternating current circuit theory and single phase transformers.

#### Electronics - Level 2 (ELR721) (4 credits)

This course introduces the student to rectifier based power supplies, thyristors and field effect transistors. Operational amplifiers and their applications are also covered. Theory is supported by appropriate labs.

#### Instrumentation - Level 2 (ELR722) (4 credits)

This course will introduce the student to instrumentation theory relating to the measurement of pressure and flow in industrial processes. The theory is supported by appropriate labs.

#### Canadian Electrical Code - Level 2 (ELR723) (4 credits)

This course primarily covers sections of the Canadian Electrical Code dealing with commercial wiring practices. It is a continuation of Canadian Electrical Code - Level 1.

#### Installation Methods - Level 2 (ELR724) (4 credits)

This lab oriented course will cover basic connection and control of alternating current and direct current motors.

#### Prints - Level 2 (ELR725) (3 credits)

This course covers interpretation of construction drawings and specifications relating to commercial construction projects. It focuses on electrical installation.

#### Monitoring & Communication Systems (ELR726) (3 credits)

This course introduces the student to monitoring and communication systems, such as fire alarm systems, nurse call systems and paging systems. Related codes and standards are also covered. Theory is supported by appropriate labs.

### Advanced (6542)

#### Electrical Theory - Level 3 (ELR820) (6 credits)

This course covers three phase alternating current circuit theory, poly-phase transformers and alternating current motors and generators.

#### Electronics - Level 3 (ELR821) (6 credits)

This course introduces the student to solid state motor drives for controlling alternating and direct current motors. Theory is supported by appropriate labs.

#### Instrumentation - Level 3 (ELR822) (4 credits)

This course will introduce the student to instrumentation theory relating to pneumatic systems. This is followed by control system theory and the principles of proportional, integral and derivative control. The theory is supported by appropriate labs.

#### Canadian Electrical Code - Level 3 (ELR823) (3 credits)

This course primarily covers sections of the Canadian Electrical Code dealing with industrial wiring practices. It is a continuation of Canadian Electrical Code - Level 2.

### Installation Methods - Level 3 (ELR824) (8 credits)

This lab oriented course will cover connection and testing of transformers, wound rotor induction motors, synchronous motors and two speed squirrel cage motors. Installation and programming of programmable logic controllers is also covered.

#### Fluid Power (ELR826) (3 credits)

This course introduces the student to the basic principles of fluid mechanics and hydraulic systems. Data collection by chart recorders and installation of smart transmitters and microprocessor controllers will also be covered. Theory is supported by appropriate labs.

# Parts Technician

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Apprentices registered in the Parts Technician trade at Sault College will be working in an online format to complete their basic and advanced training. Parts Technician is a no-restricted certified trade regulated by the Apprenticeship and Certification act.

Parts Technicians manage and dispense parts inventories, which may include automotive, heavy duty, farm implement, industrial, recreational vehicle, jobbers, plumbing, electrical, etc. Parts Technicians may be responsible for stock handling, warehousing, identifying and cataloguing parts and assemblies as well as ordering, receiving, inspecting, sorting, pricing and selling, depending on business areas. Parts Technicians must be knowledgeable in the use of all in-house equipment, including computers, calculators, facsimile (fax) and materials handling equipment, and be able to contribute to the operation of the business. Parts Technicians are employed by wholesale and retail businesses and warehouse distributors that deal with all types of parts. Customer service is key to this trade.

# **PROGRAM OF STUDY**

# **Basic (6550)**

- PTC600 6 Applied Work Practices I
- PTC610 5 Communications and Customer Support I
- PTC620 8 Merchandising and Inventory Management I
- PTC630 11 Component Technology and Technical Skills I

# Advanced (6551)

- PTC800 6 Applied Work Practices II
- PTC810 5 Communications and Customer Support II
- PTC820 6 Merchandising and Inventory Management II
- PTC830 13 Component Technology and Technical Skills II

# **Course Descriptions**

#### Basic (6550)

#### Applied Work Practices I (PTC600) (6 credits)

Students will learn about safe work practices and required legislation, basic computer operations, trade calculations/measurements and personal safety restraint systems.

#### Communications and Customer Support I (PTC610) (5 credits)

Students will gain working knowledge of basic communication techniques, memos, letters and resumes, preparing for job interviews, human relations, customer and interpersonal relations, fundamentals of motivation and leadership.

## Merchandising and Inventory Management I (PTC620) (8 credits)

Students will gain working knowledge of parts organization and structure, warehouse storage procedures, shipping and receiving procedures, terminology, catalogue systems and inventory control procedures.

## Component Technology and Technical Skills I (PTC630) (11 credits)

Students will learn to identify and understand the operation of engine components, belts, pulleys, lines and fittings, driveline components, exhaust system components, emission control system components, braking system components and steering system components.

## Advanced (6551)

#### Applied Work Practices II (PTC800) (6 credits)

Students will gain a working knowledge of the safe operation of parts handling equipment, fasteners, hand tools, measuring tools and shop equipment.

## Communications and Customer Support II (PTC810) (5 credits)

Students will gain working knowledge of customer's needs, organizational business climate, telephone operating techniques and invoices/business forms for a parts business.

## Merchandising and Inventory Management II (PTC820) (6 credits)

Students will learn about product sales procedures, product handling policies and regulations, planning and design of a parts facility, record keeping procedures, and basic accounting systems as they apply to the parts business.

## Component Technology and Technical Skills II (PTC830) (13 credits)

Students will learn about suspension system components, diagnostic test equipment, battery fundamentals and testing procedures, electrical and electronic components, electrical, electronic, electromagnetic fundamentals, bearings, seals, and sealants, ozone depleting substances, air-conditioning, heating and ventilation components and body and trim components.

# Commercial Vehicle Common Core -Level I

Section B.8 6/2/2020

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Students taking either the Heavy Duty Equipment or Truck and Coach Technician Apprenticeship programs will be registered in this common core program 6080 in Level I.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CVC611-5 Trade Practice CVC612-3 Fluid Power Systems CVC613-5 Engine Systems CVC614-6 Electrical Systems CVC615-3 Fuel Systems CVC616-4 Drive Train Systems CVC617-4 Wheel End Assemblies and Brake Systems

# **PROGRAM OF STUDY NOTES**

Note:

This Level I curriculum, program 6080, is common to Heavy Duty Equipment Technician and Truck and Coach Technician Apprenticeship programs.

# **Course Descriptions**

#### Semester 1

#### Trade Practice (CVC611) (5 credits)

Upon successful completion the apprentice is able to describe the legal responsibilities of employees and employers relating to safe working practices and protection of the environment; is able to demonstrate the operation of lifting, rigging, blocking and safety equipment; is able to use precision measuring tools; is able to perform fastening devise installation and removal procedures; is able to perform maintenance and repair procedures for bearings, seals and sealants; is able to operate heating and cutting equipment - all according to government safety regulations, environmental legislation, and manufacturers` recommendations.

#### Fluid Power Systems (CVC612) (3 credits)

Upon successful completion the apprentice is able to perform basic calculations of pressure, force and area using imperial and systme international dunits (s.i.) measurement; is able to interpret basic hydraulic and pneumatic systems; is able to explain the operation of basic hydraulic and pneumatic components; is able to describe the different types of hydraulic fluid and their applications; is able to describe the inspection and testing procedures for hydraulic and pneumatic conductors and fittings; and is able to describe a regularly scheduled maintenance service for hydraulic and pneumatic systems - all according to

manufacturers` recommendations and schematics.

#### Engine Systems (CVC613) (5 credits)

Upon successful completion the apprentice is able to explain the terminology used, and explain and identify the operating principles of engine blocks, cylinder heads, valve train and power train components; and is able to perform engine system maintenance, inspection and service procedures - all according to manufacturers` recommendations

## Electrical Systems (CVC614) (6 credits)

Upon successful completion the apprentice is able to describe the principles of electricity following accepted scientific theories and the laws governing electricity; is able to use basic electrical test equipment; is able to trace, test and repair electrical circuits; is able to locate and test circuits and components; is able to diagnose and repair electrical circuits; is able to describe the operation of electromagnetic devices; and is able to service, test and evaluate batteries - all according to manufacturers` recommendations, schematics and specifications.

## Fuel Systems (CVC615) (3 credits)

Upon successful completion the apprentice is able to describe the fundamentals of diesel fuel; is able to inspect engine fuel systems; is able to recommend repairs to diesel fuel sub-systems; is able to recommend repairs to injectors - all according to manufacturers` recommendations.

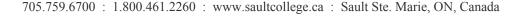
# Drive Train Systems (CVC616) (4 credits)

Upon successful completion the apprentice is able to recommend repairs to push-type clutch and flywheel assemblies, drive shafts, power take-off shafts, safety shields, universal joints, and single reduction drive axle assemblies; and is able to explain the fundamentals of gearing used in drive train systems - all according to manufacturers` procedures and recommendations

## Wheel End Assemblies and Brake Systems (CVC617) (4 credits)

Upon successful completion the apprentice is able to perform adjustments and repairs to wheel end assemblies; and is able to recommend and perform repairs to hydraulic brake systems - all according to manufacturers` recommendations and statutory criteria.

# Ironworker





# **PROGRAM OVERVIEW**

Sault College provides the in-school training for this 6,000-hour Ironworker apprenticeship program. Apprentices are scheduled by the Ministry of Training, Colleges and Universities to attend in-school training for three eight-week terms at levels one, two and three.

# **PROGRAM OF STUDY**

# Level 1 (6170)

IRN610 - 1 Protect Self and Others
IRN620 - 6 Welding Level 1
IRN640 - 8 Rigging Level 1
IRN650 - 5 Structural Steel and Platework - Level 1
IRN660 - 5 Applied Trade Calculations
IRN670 - 5 Cranes

# Level 2 (6171)

IRN710 - 4 Welding Level 2 IRN720 - 11 Rigging Level 2 IRN730 - 11 Structural Steel and Platework - Level 2 IRN740 - 4 Machinery Moving Level 2

# Level 3 (6172)

- IRN810 11 Ornamental and Miscellaneous Ironwork
- IRN820 5 Welding Level 3
- IRN830 1 Structural Steel and Platework Level 3
- IRN840 6 Curtain Wall
- IRN850 2 Machinery Moving Level 3
- IRN870 5 Automated Materials and Handling Systems

# **Course Descriptions**

#### Level 1 (6170)

#### Protect Self and Others (IRN610) (1 credits)

Upon successful completion, the apprentice will be able to describe how to work safely protecting self and others in accordance with government legislation, industry standards, and equipment manufacturers recommendations. The apprentice will be able to explain the Occupational Health and Safety ACT (OHSA) as it applies specifically to the Ironworker trade, understand the purpose and procedures of the Workplace

Safety Insurance Board (WSIB), and the role of the Construction Safety Association of Ontario (CSAO). The apprentice will be able to identify and state safe workplace practices, and describe the Workplace Hazardous Materials Information System (WHMIS).

#### Welding Level 1 (IRN620) (6 credits)

Upon successful completion, the apprentice will be able to perform oxy/fuel heating, cutting, brazing, welding, and shielded metal arc welding (SMAW) in accordance with government safety regulations and the requirements of the specified trade related task.

## Rigging Level 1 (IRN640) (8 credits)

Upon successful completion, the apprentice will be able to determine the rigging equipment and procedures required to perform lifts in accordance with government safety regulations, accepted industry standards, and the requirements of assigned traded related projects. This includes using the specified type of fiber rope for rigging and lifting work members, performing reeving procedures for blocks, and determining the required rigging materials and capacities to perform lifts.

## Structural Steel and Platework - Level 1 (IRN650) (5 credits)

Upon successful completion, the apprentice will be able to perform structural steel and platework in accordance with government safety regulations, manufacturers recommendations and accepted industry standards. This includes using and maintaining hand tools, power tools and equipment to fabricate, assemble and disassemble structural steel and platework projects, and explaining the drawings and blueprints. The apprentice will also be able to perform the fabrication of members, layout of structural steel members, and basic installation and fastening procedures for structural steel and platework.

## Applied Trade Calculations (IRN660) (5 credits)

Apprentices will learn and apply trade related calculations used in the trade to solve trade related programs.

#### Cranes (IRN670) (5 credits)

Apprentices will learn about the type and configuration of cranes. They will learn and apply principles of operation, pre-lift planning and set-up, operating procedures and erection and dismantlement of cranes.

#### Level 2 (6171)

#### Welding Level 2 (IRN710) (4 credits)

Upon successful completion, the apprentice will be able to perform shielded metal arc welding in accordance with government safety regulations and the requirements of the specified trade related task. This includes explaining blueprints and drawings related to shielded metal arc welding projects, and performing shielded metal arc position welding procedures primarily focusing on horizontal and vertical positional welding and progressing to overhead position welding as experience suits.

#### Rigging Level 2 (IRN720) (11 credits)

Upon successful completion, the apprentice will be able to determine rigging equipment and procedures required to perform lifts in accordance with government safety regulations, accepted industry standards and the requirements of assigned trade related projects. This includes using the specified type of wire rope for rigging and lifting work members, and the appropriate rigging hardware to perform safe lifts. The apprentice will also be able to perform lifts using specified slings and hoisting equipment.

#### Structural Steel and Platework - Level 2 (IRN730) (11 credits)

Upon successful completion, the apprentice will be able to perform structural steel and platework in accordance with government safety regulations, manufacturers recommendations and accepted industry standards. This includes performing the layout and fabrication of structural steel and platework members, and explaining the drawings and blueprints. As well, the apprentice will be able to describe the structural steel and platework material erection methods, and perform installation and fastening, and alignment and

inspection procedures for structural steel and platework.

#### Machinery Moving Level 2 (IRN740) (4 credits)

Upon successful completion, the apprentice will be able to move machinery in accordance with government safety regulations, accepted industry standards and the requirement of assigned trade related projects. This includes explaining the drawings and specifications required to move machinery, fabricating the required members for machinery moving operations, describing the appropriate transportations methods to move machinery, and performing the required installation and securing procedures to move machinery.

# Level 3 (6172)

## Ornamental and Miscellaneous Ironwork (IRN810) (11 credits)

Upon successful completion, the apprentice will be able to perform fabrication and installation of ornamental and miscellaneous ironwork in accordance with government safety regulations, accepted industry standards, and the requirement of assigned trade related projects. This includes explaining the drawing and layouts for project specifications, performing fabrication and layout procedures, describing material erection methods, and installing, securing, aligning and inspecting materials.

## Welding Level 3 (IRN820) (5 credits)

Upon successful completion, the apprentice will be able to perform shielded metal arc position welding (SMAW), Gas Metal Arc semi-automatic welding, plasma arc cutting, and arc gouging in accordance with government safety regulations, accepted industry standards and the requirement of assigned trade related projects. This includes explaining blueprints and drawings related to welding projects.

## Structural Steel and Platework - Level 3 (IRN830) (1 credits)

Upon successful completion, the apprentice will be able to perform structural steel and platework in accordance with government safety regulations, manufacturers recommendations and accepted industry standards. This includes performing the layout of structural steel members.

# Curtain Wall (IRN840) (6 credits)

Upon successful completion, the apprentice will be able to perform fabrication and installation of curtain wall systems in accordance with government safety regulations, accepted industry standards, and the requirements of assigned trade related projects. This includes explaining the drawings and layout for curtain wall specifications, performing the fabrication and layout procedures for curtain wall members, and erecting, aligning, securing and inspecting a curtain wall system.

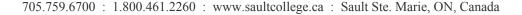
#### Machinery Moving Level 3 (IRN850) (2 credits)

Upon successful completion, the apprentice will be able to move machinery in accordance with government safety regulations, accepted industry standards, and the requirements of assigned trade related projects. This includes performing the layout, alignment and inspection of machinery moving operations.

# Automated Materials and Handling Systems (IRN870) (5 credits)

Upon successful completion, the apprentice will be able to perform automated materials handling systems and robotics installations in accordance with government safety regulations, accepted industry standards and the requirements of assigned trade related projects. This includes explaining the drawings and specifications, and fabricating, installing, securing, aligning and inspecting automated materials handling systems and robotics installations.

# Hairstylist





Section B.10

# **PROGRAM OVERVIEW**

Sault College Hairstylist Apprenticeship program provides you the opportunity to develop the necessary skills to complete competencies in this creative, exciting and artistic trade. Hairstyling students study and train in our fully-equipped, modern salon under the guidance of experienced, knowledgeable faculty. Students have access to many on-campus services including the special needs office, counselling department, library, gym and fitness centre, health centre, and employment services.

The study of the theoretical knowledge and demonstration of all practical skills in accordance with the Ontario College of Trades standards must be completed at a satisfactory evaluation upon successful completion of both Levels one and two.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Students are required to purchase textbooks and workbooks.

The basic working kit will be provided for use during the 8 week training in each level. Students may bring and use their own tools and equipment if preferred, provided they are CSA approved professional tools.

# **CAREER PATHS**

Graduates of our Hairstyling apprenticeship program have opportunities to employ their craft around the world in a variety of exciting and unusual settings. Salon work is a destination for many graduates. Others may work as platform artists or find career success in television and the performing arts. Still other graduates become colour and perm artists or move into teaching positions.

Upon completion of the advanced portion of the training, apprentices are required to prove their expertise by writing a provincial trades exam. Successful candidates will receive their provincial certificate of qualification.

# **DRESS CODE**

Black uniform with colour, pattern & accents permitted.

# **OTHER INFORMATION**

For more information, contact Jordin Boniferro-Knight at 705.759.2554, ext 2471 or email Jordin.boniferro-knight@saultcollege.ca.

# **PROGRAM OF STUDY**

# Level 1 (6350)

HST731 - 1 Ethics, Regulation and Policy HST732 - 2 Health and Safety HST733 - 2 Entrepreneurial Skills HST734 - 1 Professional Development HST735 - 1 Client Services HST736 - 2 Preparatory Procedures and Treatments HST737 - 4 Cut Hair 1 HST738 - 4 Style Hair 1 HST739 - 6 Permanent Wave Hair HST740 - 7 Colour and Lighten Hair 1

# Level 2 (6351)

HST741 - 2 Entrepreneurial Skills 2 HST742 - 2 Preparatory Procedures and Treatments 2 HST743 - 5 Cut Hair 2 HST744 - 5 Style Hair 2 HST745 - 6 Chemically Relax Hair HST746 - 7 Colour and Lighten Hair 2 HST747 - 3 Hair Additions

# **Course Descriptions**

#### Level 1 (6350)

#### Ethics, Regulation and Policy (HST731) (1 credits)

This course will enable the apprentice to complete all services in adherence to the guidelines of professional ethics, government regulations and workplace standards. The apprentice will have the knowledge to successfully comprehend policies and their procedures following employer and manufacturers specifications.

#### Health and Safety (HST732) (2 credits)

This course will establish safe working practises utilizing and performing sanitization procedures in accordance with health regulations and legislation.

#### Entrepreneurial Skills (HST733) (2 credits)

This course will introduce and demonstrate the entrepreneurial skills used in relation to the operation and administration of a hairstyling salon business to prepare apprentices for salon ownership.

#### Professional Development (HST734) (1 credits)

This course will develop an apprentices skill to adapt to various and changing technologies, applications and procedures in the hair styling industry. Career mapping and goal setting strategies will enable the apprentice future professional development.

Client Services (HST735) (1 credits)

This course will enable the apprentice to communicate effectively with clients to meet their individual needs. Costumer service strategies will develop the apprentices ability to build loyal client base.

## Preparatory Procedures and Treatments (HST736) (2 credits)

This course will prepare the apprentice to recognize hair and scalp conditions with the ability to select and apply products to meet the expectations of the client. The preparation of clients for services will be introduced and practised individual providing protection to the client, their clothing and the apprentice.

#### Cut Hair 1 (HST737) (4 credits)

This course will develop the apprentices practical skills in cutting hair according to the clients needs and expectations. Developing and utilizing analysis techniques to recognize and understand the importance of head shape, hair characteristics and facial features in relation to the service of hair design. This course will introduction students to various cutting tools their effect and outcome each can achieve.

#### Style Hair 1 (HST738) (4 credits)

This course will include the relationship of tools to hair based on the characteristics and predetermined outcome. Hand dexterity practises such as waving and moulding along with pin curls and thermal tools will be used to develop proficient manipulation and comfort while working. This course will enable the apprentice to successfully select and apply both standard and specialized techniques to effectively style wet and dry hair.

#### Permanent Wave Hair (HST739) (6 credits)

This course will deliver the theory to provide the apprentice a complete understanding of the chemical breakdown of the products, their effects and results created when permanent waving hair. Development of various methods of application and selection of products will enable the apprentice to achieve client expectations.

#### Colour and Lighten Hair 1 (HST740) (7 credits)

This course when successfully complete will enable the apprentice to colour and highlight/lowlight hair using various products and methods of application. The apprentice will have the ability to analyse hair characteristics, communicate through consultation and use color tools to successfully provide and meet client expectations.

#### Level 2 (6351)

#### Entrepreneurial Skills 2 (HST741) (2 credits)

This is a business skills development course that will enable an apprentice to successfully prepare day sheets, perform basic banking transactions and monitor and control inventory. This course will feature the benefits and advantages of developing marketing and promotional sales strategies to benefit professional growth.

#### Preparatory Procedures and Treatments 2 (HST742) (2 credits)

This course will enable the apprentice to select and administer preparatory procedures and/or treatments to the hair and scalp specific to client needs. Product knowledge and chemical content will be discussed and researched for a complete understanding of the effects and benefits for their use.

#### Cut Hair 2 (HST743) (5 credits)

The apprentice theoretical learning within this course will include the tools used to cut hair and the affects creating by their use, anatomy of the head in relation to the areas and reference points used in hair cutting, creating and designing a cut to complement and enhance clients facial features.

#### Style Hair 2 (HST744) (5 credits)

This course will enable the student to select and use standard tools and equipment to effectively style wet and dry hair. Specialized techniques will develop and provide students the ability to perform professional hair styling finish skills to meet client needs.

#### Chemically Relax Hair (HST745) (6 credits)

This course, upon successful completion will provide the apprentice the ability to chemically relax hair, demonstrating the skill while applying the relevant knowledge of chemical products used. The selection and application techniques developed will enable the apprentice to meet the needs and expectations of the client.

#### Colour and Lighten Hair 2 (HST746) (7 credits)

This course consists of the advanced knowledge of the relationship between colours and will enable the apprentice to successfully colour, lighten and tone hair. Special circumstance situations such as removal of unwanted tones and colours and re-creating natural levels will be learned through theory, formulation and procedural applications.

#### Hair Additions (HST747) (3 credits)

This course will include the relevant knowledge and procedural steps to enable an apprentice to perform a visual analysis of fibers, additions types and their attachment method. The apprentice will practice in the selection, application methods of applying colour changes for hair additions. Apprentices will demonstrate the services of cutting and styling hair additions to meet client needs. The process of analysis will assist in recommending home care to include tools, products and frequency of maintenance procedures.

# Plumber

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Plumbing may be defined as a network of piping for the purpose of supplying potable water and the discharge of sanitary wastes.

The history of plumbing is an interesting one in which prehistoric man of a hundred thousand years ago left indications of sanitation and plumbing skills. Crude as these devices were, they offered proof that even these primitive people realized the consequences of poor plumbing. The plumber was called plumbarius, taken from the Latin word plumbum, meaning lead. Although design has not changed through the years, the materials have changed to copper and plastic, as opposed to galvanized and lead.

Sault College is the only college north of Toronto involved with in-school training for this five-year apprenticeship program. Students are scheduled for eight-week sections of training which consist of basic, intermediate, and advanced levels which are delivered in our modern shops and classrooms. The in-school theory is based on typical design and installation in residential, commercial, and industrial buildings and is regulated by Part 7 (Plumbing) of the Ontario Building Code.

# **CAREER PATHS**

Apprentices in the plumbing trade may be employed by mechanical contractors in residential, commercial, or institutional environments.

# **PROGRAM OF STUDY**

# Level I (6240)

MET621 - 3 Welding PLM660 - 12 Plumbing Systems - Level PLM661 - 6 Tools and Piping Methods PLM662 - 3 Trade Calculations - Level I PLM663 - 3 Trade Documentation - Level I PLM664 - 3 Workplace Safety, Rigging and Hoisting

# Level II (6241)

MET721 - 3 Welding PLM760 - 15 Plumbing Systems - Level II PLM761 - 6 DWV Piping Systems PLM762 - 3 Trade Calculations - Level II PLM763 - 3 Trade Documentation - Level II

# Level III (6242)

PLM860 - 18 Plumbing Systems - Level III PLM861 - 6 Process Piping Systems PLM863 - 6 Trade Documentation - Level III

# **Course Descriptions**

#### Level I (6240)

#### Welding (MET621) (3 credits)

This course provides apprentices with a combination of knowledge and practical skill in the operation and safe use of oxy-acetylene flame cutting and fusion welding equipment. Trade specific skills are developed through the preparation and fusion welding of lap, tee and groove weld joints on both flat gage metal and small diameter pipe. Personal and shop safety are stressed throughout the course and are reinforced by means of an independent reading assignment complete with a final theory test.

#### Plumbing Systems - Level (PLM660) (12 credits)

In this course students will gain basic knowledge about pipe and fitting materials including pipe supports and hangars. Students will also learn about drainage systems, waste pipe systems and venting systems as well as code regulations.

#### Tools and Piping Methods (PLM661) (6 credits)

The students will have the opportunity to practice safe handling and proper use of hand and power tools. They will practice performing various tasks in the grade including steel, cast iron and copper pipe joining.

#### Trade Calculations - Level I (PLM662) (3 credits)

The student will learn basic math calculations including conversions of SI to Imperial and US values, linear measurements, calculation of various offsets and square roots used in the trade.

#### Trade Documentation - Level I (PLM663) (3 credits)

This course provides the basic knowledge required for students to identify, interpret and draw piping systems using various drafting tools.

#### Workplace Safety, Rigging and Hoisting (PLM664) (3 credits)

This course will provide the students with information and knowledge about workplace safety including codes, acts and regulations. Students will also learn safe rigging and hoisting procedures.

#### Level II (6241)

#### Welding (MET721) (3 credits)

This course provides apprentices with a combination of knowledge and practical skills in the operation and safe use of shielded metal arc welding equipment. Trade specific skills are developed through the preparation and welding of lap, tee and groove weld joints on steel plate and pipe in the flat and horizontal position. Safe work practices and weld quality are stressed throughout the course and are reinforced by means of an independent reading assignment complete with a final theory test.

#### Plumbing Systems - Level II (PLM760) (15 credits)

This course provides the student with a working knowledge of water distribution systems, plumbing fixtures, equipment and code requirements in drainage, venting and waste pipe systems, pipe and fitting materials, pipe supports and hangars.

#### DWV Piping Systems (PLM761) (6 credits)

The student will have the opportunity to design, conduct and test various drain, waste, vent and storm roughing and fixture installations. They will practice performing various services, maintenance and repairs

in a lab environment.

### Trade Calculations - Level II (PLM762) (3 credits)

This course provides the students with the basic knowledge to perform calculations pertaining to the piping industry. Students will learn about area, surface area, volume calculations as well as percentages and ratios.

## Trade Documentation - Level II (PLM763) (3 credits)

This course provides the knowledge required for the student to read and interpret documents and drawings required for plumbing in the construction industry, draw piping systems using the appropriate drafting tools. Students will demonstrate effective interpersonal relations, receive and react to instructions, as well as write job related documents.

## Level III (6242)

## Plumbing Systems - Level III (PLM860) (18 credits)

This course provides the students with information and knowledge in waste pipe and water distribution systems, codes, storm and drainage systems, as well as sewage disposal systems. In addition, students will learn about hydronic heating systems, natural gas, medical gas, and industrial process piping systems.

#### Process Piping Systems (PLM861) (6 credits)

The students will perform various process piping systems service, maintenance and repairs in a lab environment.

## Trade Documentation - Level III (PLM863) (6 credits)

This course provides the student with the knowledge required to identify, read and interpret plumbing and hydronic piping drawings as well as job specs for the ICI sector. Students will also learn to produce various plumbing drawings. Other topics covered in this course include bids and contracts and simple compound interest.

# Automotive Service Technician

Section B.12 6/2/2020

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

Apprentices registered in the Automotive Service Technician Apprenticeship are scheduled for three eight-week sections of in-school training which is scheduled through the Ministry of Training, Colleges & Universities.

There are three levels of training in the Automotive Service Technician trade. Objectives of all three levels of curriculum are to provide more comprehensive learning experiences for the speciality trade of automotive service technician in terms of:

- Sound theoretical training to meet the challenges presented by the increasingly more complex designs and testing techniques.
- Acquisition of fundamental and specific skills of the trade through the training of practical applications.
- Strengthening the apprentices` high standards of craftsmanship, problem-solving skills and personal pride in their respective trades.
- Strengthening desirable work attitudes and a keen sense of responsibility, particularly in regard to public and personal safety.

# **PROGRAM OF STUDY**

# Level I (6067)

- AST611 4 Work Practices
- AST612 4 Engine Systems
- AST613 12 Electrical/Electronic and Emissions Systems
- AST614 5 Drive Train Systems
- AST615 5 Suspension/Steering and Brake Systems

# Level II (6068)

- AST711 4 Air Conditioning Systems
- AST712 4 Engine Systems
- AST713 12 Electrical/Electronic and Emissions Systems
- AST714 5 Drive Train Systems
- AST715 5 Suspension/Steering and Brake Systems

# Level III (6069)

- AST811 4 Work Practices
- AST812 4 Engine Systems
- AST813 12 Electrical/Electronic and Emissions Systems
- AST814 5 Drive Train Systems
- AST815 5 Suspension/Steering and Brake Systems

# **Course Descriptions**

### Level I (6067)

### Work Practices (AST611) (4 credits)

Upon successful completion the apprentice will have the ability to identify fastener characteristics, select proper applications, and install and remove fasteners; the ability to define the purpose, construction, application, inspect, diagnose, remove and install bearings, seals and sealants; the ability to perform precision measurements and to maintain, calibrate and properly store precision measuring instruments; the ability to describe the function, construction, applications of oxy-acetylene equipment, and to demonstrate the safe use when performing heating and cutting operations; the ability to perform safe vehicle hoisting and lifting; and the ability to perform necessary trade related computer functions and access trade and service information using a PC and the Internet - all according to accepted trade practices, approved industry standards, and manufacturers` recommendations and guidelines.

#### Engine Systems (AST612) (4 credits)

Upon successful completion the apprentice will have the ability to explain the operating characteristics of internal combustion engines and perform engine disassembly/reassembly; the ability to explain the construction and operating principles of cylinder block assembly components; the ability to perform recommended inspection/testing of cylinder block and components, and explain recommended rebuilding procedures; and the ability to explain the operation of crankshafts and bearings, and perform recommended inspection/measuring procedures - all according to accepted industry standards, and manufacturers` standards and design.

## Electrical/Electronic and Emissions Systems (AST613) (12 credits)

Upon successful completion the apprentice will have the ability to explain the terminology and principles of operation of electricity; the ability to select, measure and use various types of electrical test equipment; the ability to explain the purpose of construction, principles of operation, and perform inspection and testing of batteries; the ability to perform circuit calculations to verify Ohms and Watts Laws; the ability to demonstrate knowledge of wiring schematics, component identification and ability to trace electrical circuits; the ability to describe the purpose, construction and principles of operations of circuit protection devices and perform circuit repairs, electromagnetic devices, electronic devices, fuel system components, intake and exhaust systems including inspection/testing; the ability to explain the basic operation of emission control systems; and the ability to explain the purpose, operation and safety working practices associated withy hybrid vehicles - all according to sound scientific principles, accepted trade standards, and manufacturers` standards, instructions and recommendations.

#### Drive Train Systems (AST614) (5 credits)

Upon successful completion the apprentice will have the ability to visually inspect, diagnose, troubleshoot and perform repairs on clutch systems and components; the ability to explain basic gear theory and operation; the ability to describe the operation of manual transmissions/transaxles; and the ability to perform visual inspection, test, diagnose and repair manual transmission/transaxle - all according to manufacturers` standards and recommendations.

#### Suspension/Steering and Brake Systems (AST615) (5 credits)

Upon successful completion the apprentice will have the ability to explain the fundamental theories, characteristics and applications relative to suspension systems; the ability to identify and explain types, and the construction of frames, steering and suspension components; the ability to explain the operation of suspension and steering systems and components; the ability to inspect and test suspension and steering systems and components; the ability to explain, test, repair and service tires and wheels; and the ability to explain, identify, inspect and service brake systems and components - all according to principles of physics, and manufacturers` standards and recommendations.

#### Level II (6068)

#### Air Conditioning Systems (AST711) (4 credits)

Upon successful completion the apprentice will have the ability to explain the functions and perform inspection, testing and diagnose heating and ventilation system; the ability to explain the functions and perform inspection, testing and diagnose air conditioning system; and be aware of provincial statues and regulations pertaining to the automotive repair industry as required by law - all according to manufacturers' recommendations.

#### Engine Systems (AST712) (4 credits)

Upon successful completion the apprentice will have the ability to explain the operating characteristics, perform inspection and service of camshafts and valve train; the ability to explain the service procedures, perform inspection, measurement and replacement procedures of engine cylinder heads and related components; and the ability to explain the operation, perform inspection, diagnosis and replacement procedures of turbochargers, superchargers and related components - all according to manufacturers` standards.

#### Electrical/Electronic and Emissions Systems (AST713) (12 credits)

Upon successful completion the apprentice will have the ability to explain the characteristics of various circuit types and perform circuit calculations using a selection of meters; the ability to explain the purpose, principles of operation and usage of diagnostic test equipment; the ability to explain the purpose, construction and operating principles of cranking systems; the ability to explain cranking system operations and perform diagnosis; the ability to explain the construction, principles of operation, inspection and testing of electronic devices, ignition systems, charging systems, electronic-controlled gasoline fuel injection systems, and emission control systems - all according to manufacturers` standards and recommendations, and accepted trade practices.

#### Drive Train Systems (AST714) (5 credits)

Upon successful completion the apprentice will have the ability to perform visual inspection, diagnose, troubleshoot and repair front wheel drive axle assemblies, rear wheel drive drivelines, final drive assemblies, automatic transmission torque converters, and automatic transmission/transaxles; and the ability to describe the operation of automatic transmissions/transaxles - all according to manufacturers` standards.

#### Suspension/Steering and Brake Systems (AST715) (5 credits)

Upon successful completion the apprentice will have the ability to inspect, test and service suspension and steering systems; the ability to identify and explain the construction and operation of steering gear systems including inspection and testing procedures; the ability to define, explain and calculate wheel alignment angle adjustments; the ability to operate wheel alignment equipment; and the ability to inspect, diagnose disc and drum brake systems - all according to manufacturers` recommendations.

#### Level III (6069)

#### Work Practices (AST811) (4 credits)

Upon successful completion the apprentice will have the ability to explain the operating principles, perform inspection, test and diagnose climate control systems; and the ability to explain the purpose and construction of body trim and glass components and perform necessary repairs - all according to manufacturers` standards and recommendations.

#### Engine Systems (AST812) (4 credits)

Upon successful completion the apprentice will have the ability to explain the operating principles of cooling systems, belt pulley systems, and lubrication systems, and perform maintenance, diagnose and service on these systems; the ability to explain and perform the recommended engine diagnostic and testing procedures; and the ability to explain recommended engine replacement and start-up procedures -

all according to manufacturers' recommendations and trade practices.

#### Electrical/Electronic and Emissions Systems (AST813) (12 credits)

Upon successful completion the apprentice will have the ability to explain the principles of operations of vehicle on board computers; the ability to explain the fundamentals, construction, principles of operation, inspection, and testing procedures of supplemental restraint systems, distributorless ignition systems, computer-controlled charging systems, gasoline fuel injection systems, and diesel fuel systems; the ability to explain the principles of operation, inspection and testing procedures of electrical accessories, and emission control systems to On Board Diagnostics II (ODB II) standards; and the ability to explain the principles of operation and diagnosis of fuel, electrical drive and regenerative braking systems associated with hybrid vehicles - all according to manufacturers` standards.

## Drive Train Systems (AST814) (5 credits)

Upon successful completion the apprentice will have the ability to explain the detailed operation of automatic transmissions/transaxles; the ability to perform visual inspection, diagnosis, troubleshoot and repair automatic transmissions/transaxles, hydraulic systems, electronic controls, and 4-wheel drive and all-wheel drive systems; and the ability to identify and define the basic operation of Hybrid/Alternate Drive Trains - all according to manufacturers` standards and recommendations.

## Suspension/Steering and Brake Systems (AST815) (5 credits)

Upon successful completion the apprentice will have the ability describe and explain the construction and operation of power assisted brakes including inspection, testing and diagnostic procedures; the ability to inspect, test and diagnose anti lock, stability and traction controls systems including performing bleeding of the hydraulic system; the ability to explain the operation and components of electronic braking systems, tire pressure monitoring systems, and tire electronic suspension systems; the ability to perform pre-alignment inspections and a wheel alignment; and the ability to identify and explain vehicle handling problems - all according with manufacturers' standards and recommendations.

# Truck and Coach Technician

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# 6/2/2020

Section B.13

# **PROGRAM OVERVIEW**

Apprentices registered in the Truck and Coach Technician trade are scheduled for three eight-week sections of in-school training which is scheduled through the Ministry of Training, Colleges & Universities.

The basic level is Program #6080 - Commercial Vehicle & Equipment Common Core (CVAE Level One) curriculum which has been developed in keeping with the prescribed Ministry of Training, Colleges & Universities Apprenticeship Training Standards and is common to the four trades of Heavy Duty Equipment Technician, Truck and Coach Technician, Power Lift Truck Technician and Farm Equipment Mechanic.

The next two levels are Level Two and Level Three of the Truck and Coach Technician trade. Objectives of all three levels of curriculum are to provide more comprehensive learning experiences for the speciality trade of Truck and Coach Technician in terms of:

- Sound theoretical training to meet the challenges presented by the increasingly more complex designs and testing techniques.
- Acquisition of fundamental and specific skills of the trade through the training of practical applications.
- Strengthening the apprentices` high standards of craftsmanship, problem-solving skills and personal pride of their respective trades.
- Strengthening desirable work attitudes and a keen sense of responsibility, particularly in regard to public and personal safety.

# **PROGRAM OF STUDY**

# Level II (6081)

- TCT711 4 Trade Practices and Auxiliary Systems
- TCT712 5 Engine Systems
- TCT713 5 Electrical Systems
- TCT714 3 Fuel Systems
- TCT715 2 Vehicle Management Electronics and Emissions Systems
- TCT716 5 Drive Train
- TCT717 6 Steering, Suspension and Brake Systems

# Level III (6082)

- TCT811 3 Trade Practices and Auxiliary Systems
- TCT812 5 Engine Systems
- TCT813 4 Electrical Systems
- TCT814 3 Fuel Systems
- TCT815 4 Vehicle Electronics Management and Emissions Systems
- TCT816 5 Drive Train
- TCT817 6 Steering, Suspension and Brake Systems

# **PROGRAM OF STUDY NOTES**

Note:

To view Level I courses, please see the courses displayed under the Commerical Vehicle Common Core Program - Program #6080.

# **Course Descriptions**

#### Level II (6081)

#### Trade Practices and Auxiliary Systems (TCT711) (4 credits)

Upon successful completion the apprentice is able to perform down-hand welding repairs and installations on vehicle chassis components, and identify the characteristics of sound welds using electric arc and MIG welding process; is able to use manufacturers service literature, personal computers and networks to locate service and parts information, and understand networking protocols of OEM Intranet data hubs; is able to repair vehicle cab components and fixtures to the manufacturers and statutory standards; and is able to describe the different types of truck and coach rig configuration used in highway applications, and access information to determine legal vehicles by weight, height and length.

#### Engine Systems (TCT712) (5 credits)

Upon successful completion the apprentice is able to understand the principle of operation, diagnose and repair diesel engine cylinder heads, valve trains, and gasoline engines.

#### Electrical Systems (TCT713) (5 credits)

Upon successful completion the apprentice is able to understand the principles of operation, diagnose and repair heavy-duty batteries, truck and heavy duty cranking circuits, and truck and coach auxiliary electrical components; is able to understand the principles of Electrical circuit schematics and use them to diagnose and repair truck and coach electrical systems; and is able to understand the fundamental of electronics and diagnose malfunctions in electronically managed circuits and components.

#### Fuel Systems (TCT714) (3 credits)

Upon successful completion the apprentice is able to understand the principles of high pressure diesel fuel injection; is able to understand the principle of operation, diagnose and repair Electronic Unit Injector (EUI) diesel fuel systems, and gasoline and alternate fuel injection systems; and is able to understand the principles of diesel engine governing.

#### Vehicle Management Electronics and Emissions Systems (TCT715) (2 credits)

Upon successful completion the apprentice is able to use generic and proprietary ESTs and PCs to read, troubleshoot and reprogram vehicle electronic systems; is able to understand the basics of a vehicle computer control system and how it functions to process information and produce outcomes; and is able to understand the principles of operation, diagnose and repair electronic input circuit components.

#### Drive Train (TCT716) (5 credits)

Upon successful completion the apprentice is able to understand the principles of operation, diagnose and repair pull-type clutches and flywheel assemblies, countershaft manual transmission and auxiliary sections, multiple speed and double reduction drive axle assemblies, power divided tandem drive assemblies, and electronically automated standard transmissions.

## Steering, Suspension and Brake Systems (TCT717) (6 credits)

Upon successful completion the apprentice is able to understand the principles of operation of truck and coach air brake systems; is able to diagnose and repair truck and coach air brake systems, and suspension systems; is able to understand the principles of operation, diagnose and repair heavy duty hydraulic and air-over-hydraulic brakes, wheel end assemblies, and truck and coach mechanical suspensions; and is able to understand the operating principles of truck and coach tire and wheel assemblies, and air suspension systems.

## Level III (6082)

## Trade Practices and Auxiliary Systems (TCT811) (3 credits)

Upon successful completion the apprentice is able to understand the principles of operation, diagnose and repair truck and coach heating, ventilation and air conditioning systems to manufacturers and environmental safety standards; and is able to describe the legal responsibilities of employers and employees for safety, environment and equipment practices according to Government Safety and Environmental Legislation.

## Engine Systems (TCT812) (5 credits)

Upon successful completion the apprentice is able to understand the principles of operation, diagnose and repair heavy duty, diesel engine intake systems, exhaust systems, turbochargers, heavy duty cooling systems, and diesel engine brakes and retarders; is able to describe the operating principles of heavy duty lubricating systems and oils, and repair typical lubricating circuit problems; is able to understand the principles of failure analysis and implement them on failed diesel engine components; is able to understand the principles and practices of sequential troubleshooting strategies and symptom based diagnostic routines on heavy duty diesel engines; and is able to describe how to break-in a new or rebuilt diesel engine and interpret dynamometer test results on diesel engines.

#### Electrical Systems (TCT813) (4 credits)

Upon successful completion the apprentice is able to understand the principle of operation, diagnose and repair heavy duty charging circuits, and heavy duty ignitions systems and components; and is able to disassemble, repair, reassemble and diagnose heavy duty electrical components.

#### Fuel Systems (TCT814) (3 credits)

Upon successful completion the apprentice is able to understand the principles of operation, diagnose and repair hydraulically actuated, electronic unit injector systems; electronic unit pump diesel fuel systems, time-pressure (TP), electronic common rail systems, and electronically controlled, common rail accumulator, high pressure injection pumps.

#### Vehicle Electronics Management and Emissions Systems (TCT815) (4 credits)

Upon successful completion the apprentice is able to understand the difference between customer and proprietary data programming and outline the procedure required to perform vehicle computer programming; is able to understand the basics of vehicle electronic system multiplexing and describe how digital communications can reduce the complexity of control circuits; is able to understand the principles of operation, diagnose and repair emission control devices and systems on trucks and coaches; is able to understand the operating principles and perform repairs on hybrid drive (diesel/electric) systems and their control mechanisms; and is able to describe the operating principles of typical collision avoidance systems, identify the system hardware and access stored data in the system.

#### Drive Train (TCT816) (5 credits)

Upon successful completion the apprentice is able to understand the principles of operation, diagnose and repair truck and coach torque converter units, automatic transmissions and vehicle retarders to manufacturers standards, and electronically controlled automatic transmissions, transfer case drop box and power take-off assemblies.

#### Steering, Suspension and Brake Systems (TCT817) (6 credits)

Upon successful completion the apprentice is able to interpret pneumatic schematic symbols and circuits, and use schematics to troubleshoot typical vehicle problems; is able to understand the principles of operation, diagnose and repair ABS, ATC and RDS systems to manufacturers and statutory standards; is able to perform air brake troubleshooting using service literature, air brake schematics and test instruments; is able to understand the principles of operation, diagnose and repair of ABS and ATC systems, mechanical steering gears, truck, coach, bus and trailer frames and bodies, truck and coach coupling systems, and hydraulic vehicle alignment components.

# Heavy Duty Equipment Technician

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Apprentices registered in the Heavy Duty Equipment Technician trade are scheduled for three eight-week sections of in-school training which is scheduled through the Ministry of Training, Colleges & Universities.

The basic level is Program #6080 - Commercial Vehicle & Equipment Common Core (CVAE Level One) curriculum which has been developed in keeping with the prescribed Ministry of Training, Colleges & Universities Apprenticeship Training Standards and is common to the four trades of Heavy Duty Equipment Technician, Truck and Coach Technician, Power Lift Truck Technician and Farm Equipment Mechanic.

The next two levels are Level Two and Level Three of the Heavy Duty Equipment Technician trade. Objectives of all three levels of curriculum are to provide more comprehensive learning experiences for the speciality trade of Heavy Duty Equipment Technician in terms of:

- Sound theoretical training to meet the challenges presented by the increasingly more complex designs and testing techniques.
- Acquisition of fundamental and specific skills of the trade through the training of practical applications.
- Strengthening the apprentices` high standards of craftsmanship, problem-solving skills and personal pride of their respective trades.
- Strengthening desirable work attitudes and a keen sense of responsibility, particularly in regard to public and personal safety.

# **PROGRAM OF STUDY**

# Level II (6085)

HET711 - 3 Trade Practice HET712 - 7 Fluid Power Systems

- HET713 4 Engine Systems
- HET714 5 Electrical/Electronic Systems
- HET715 4 Fuel Systems
- HET716 4 Drive Train Systems
- HET717 3 Steering, Tires and Brake Systems

# Level III (6086)

HET811 - 3 Trade Practices

- HET812 6 Fluid Power Systems
- HET813 3 Engine Systems
- HET814 5 Electrical/Electronic Systems
- HET815 5 Fuel Systems
- HET816 4 Drive Train Systems
- HET817 4 Brake, Track and Suspension Systems

# **PROGRAM OF STUDY NOTES**

Note:

To view Level I courses, please see the courses displayed under the Commerical Vehicle Common Core Program #6080.

# **Course Descriptions**

#### Level II (6085)

#### Trade Practice (HET711) (3 credits)

Upon successful completion the apprentice is able to perform heating, cutting, fusion welding and brazing activities; is able to describe air conditioning system testing and repair procedures; is able to describe the operation, testing and repair procedures of automatic climate control systems (HVAC); and is able to identify unsafe/faulty operator protection devices; - all following manufacturers` recommendations, government regulations and safe work practices.

#### Fluid Power Systems (HET712) (7 credits)

Upon successful completion the apprentice is able to interpret schematics and perform pressure force and area calculations related to hydraulics; is able to describe the service procedures of hydraulic fluids, reservoirs and conditioners; is able to replace hydraulic lines and fittings; is able to recommend repairs of hydraulic control valves; is able to recommend repairs of hydraulic pumps - all following manufacturers` recommendations.

#### Engine Systems (HET713) (4 credits)

Upon successful completion the apprentice is able to describe testing procedures for combustion chamber condition; is able to describe the testing and servicing procedures for cylinder heads, valve trains and related components, cooling systems components and coolants, lubricating systems components and lubricants, and air induction and exhaust systems - all following manufacturers` recommendations and safe work practices.

#### Electrical/Electronic Systems (HET714) (5 credits)

Upon successful completion the apprentice is able to describe the principles of electricity following accepted scientific principles; is able to trace current flow through circuits with the use of an electrical schematic; is able to recommend repair of cranking systems; and is able to test basic electronic components - all following manufacturers` recommendations.

#### Fuel Systems (HET715) (4 credits)

Upon successful completion the apprentice is able to describe the testing procedures for mechanical governor systems, diesel in-line fuel injection pump system service procedures, timing procedures for distributor pump systems, and diesel unit injection system repair procedures; and is able to identify injector replacement procedures - all following manufacturers` recommendations and government policies.

#### Drive Train Systems (HET716) (4 credits)

Upon successful completion the apprentice is able to describe the repair procedures for drive train systems, and testing and repair procedures for power shift transmissions - all following manufacturers` recommendations and safe work practices.

#### Steering, Tires and Brake Systems (HET717) (3 credits)

Upon successful completion the apprentice is able to recommend testing and servicing for steering

systems, tires, wheels and hubs; is able to perform repairs of hydraulic brake systems - all following manufacturers` recommendations and safe work practices.

#### Level III (6086)

### Trade Practices (HET811) (3 credits)

Upon successful completion the apprentice is able to perform shielded metal arc and metal inert gas (MIG) welding procedures following manufacturers recommendations, government regulations and safe work practices.

## Fluid Power Systems (HET812) (6 credits)

Upon successful completion the apprentice is able to interpret hydraulic system schematics; is able to evaluate hydraulic circuit design and compare with manufacturers schematics; is able to recommend repairs for hydraulic actuators, accumulators and accessories, and electronically managed hydraulic systems; and is able to diagnose hydraulic systems and recommend repairs.

#### Engine Systems (HET813) (3 credits)

Upon successful completion the apprentice is able to describe the testing and servicing procedures for engine short block assemblies and reconditioning; and is able to demonstrate the diagnostic procedures used for engines - all following manufacturers` recommendations.

## Electrical/Electronic Systems (HET814) (5 credits)

Upon successful completion the apprentice is able to recommend repair of charging systems; is able to test computerized management systems; and is able to test and diagnose electrical circuit defects - all following manufacturers` recommendations.

## Fuel Systems (HET815) (5 credits)

Upon successful completion the apprentice is able to recommend the testing and servicing procedures for diesel fuel injection partial-authority engine management systems; is able to recommend repairs for diesel fuel injection full-authority engine management systems; and is able to interpret the exhaust emissions produced by diesel engines - all following manufacturers' recommendations.

#### Drive Train Systems (HET816) (4 credits)

Upon successful completion the apprentice is able to recommend repairs for torque converters, fluid couplings, hydraulic retarders, and hydrostatic drive systems following manufacturers` recommendations.

#### Brake, Track and Suspension Systems (HET817) (4 credits)

Upon successful completion the apprentice is able to perform repairs of hydraulic brake systems and suspension systems; and is able to recommend the repair procedures for track-type undercarriages - all following manufacturers' recommendations and safe work practices.

# Utility Arborist

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



Section B.15

# **PROGRAM OVERVIEW**

The Utility Arborist Level One and Two Apprenticeship program consists of a twelve-week basic session and a twelve-week advanced session, both starting in January (alternating years). The program focuses on advanced topics in the maintenance and removal of trees, equipment use, tree climbing and utility arboricultural sciences with a strong emphasis on safety and working in a team environment.

The Utility Arborist Level One Apprenticeship program consists of a twelve-week basic session starting in January. The program focuses on maintenance and removal of trees in various settings with a strong emphasis on safety.

The Utility Arborist Level Two Apprenticeship program consists of a twelve-week advanced session starting in January. The program focuses on advanced topics in equipment use, tree climbing and utility arboricultural sciences with a strong emphasis on safety and working in a team environment.

A Utility Arborist prunes or clears woody plants in proximity to exposed electrical apparatus or in the course of utility line clearing operations, prunes, fall or removes trees which could come into contact with energized power lines.

Utility Arborist is a non-restricted certified trade regulated by the Apprenticeship and Certification Act. On successfully completing the apprenticeship program, a person working in this trade is entitled to a Certificate of Apprenticeship and can challenge the trade examination to obtain a Certification of Qualification.

# **CAREER PATHS**

Apprentices in the utility arborist trade may be employed in the utility, municipal or commercial tree care sectors; as well as tree services, golf courses, public utilities or self-employment.

Recent ice storms in major city centres have led to increased need for forestry care for the tens of thousands of damaged trees.

# **PROGRAM OF STUDY**

# Level One (6560)

- ARB600 3 Utility Arborist Workplace Safety I
- ARB601 5 Utility Arborist Theory I
- ARB602 12 Utility Arborist Practices I
- ARB603 3 Utility Arborist Hand Tools I
- ARB604 1 Utility Arborist Equipment I
- ARB605 3 Utility Arboricultural Science I
- ARB606 3 Utility Arborist Tree Identification I

# Level Two (6561)

- ARB701 2 Utility Arborist Workplace Safety II
- ARB702 3 Utility Arborist Theory II
- ARB703 12 Utility Arborist Practices II Tree Climbing
- ARB704 3 Utility Arborist Practices II Aerial Device
- ARB705 2 Utility Arborist Practices II-Brush Chippers/Aerial Devices
- ARB706 2 Utility Arborist Sciences II
- ARB707 1 Utility Arborist Hand Tools II
- ARB708 3 Utility Arborist Tree Identification II
- ARB709 2 Utility Arborist Transmission Line Clearing II

# **Course Descriptions**

## Level One (6560)

## Utility Arborist Workplace Safety I (ARB600) (3 credits)

This course will provide the student with the skills, tools and knowledge necessary to demonstrate a working knowledge of pertinent safety and related legislation as they apply to utility arboriculture safe workplace practices; and deal with potentially dangerous on- site conditions, emergencies, hazards and materials.

## Utility Arborist Theory I (ARB601) (5 credits)

This course will provide the student with the skills, tools and knowledge necessary to describe how to plan work safely, identify electrical hazards, identify other hazards outside of the electrical environment, removing of trees, rigging principles, and how to manage fire and dangerous goods.

## Utility Arborist Practices I (ARB602) (12 credits)

This course will provide the student with the skills, tools and knowledge necessary to demonstrate a knowledge of how to plan work safely, utilizing safe work practices, pruning and removing of trees in proximity of electrical conductors, ascending, descending, and performing an aerial rescue, inspect, adjust and maintain personal protective equipment, and fall protection equipment utilized in the Utility Arboricultural trade and managing fire, waste and dangerous goods.

## Utility Arborist Hand Tools I (ARB603) (3 credits)

This course will provide the student with the skills, tools and knowledge necessary to select adjust, maintain and store tools and equipment commonly used in the utility arboriculture trade.

## Utility Arborist Equipment I (ARB604) (1 credits)

This course will provide the student with the skills, tools and knowledge necessary to demonstrate a thorough working knowledge of brush chippers.

## Utility Arboricultural Science I (ARB605) (3 credits)

This course will provide the student with the skills, tools and knowledge necessary to identify various woody plant parts, growth factors, compartmentalization of decay, diseases, disorders and pathology that could be harmful to the integrity of the electrical system, evaluate the condition of anchor points used in fall protection, and evaluate work operations within environmentally sensitive areas.

## Utility Arborist Tree Identification I (ARB606) (3 credits)

This course will provide the student with the skills, tools and knowledge necessary to demonstrate a working knowledge of tree genera, species and cultivars by identifying 52 plant species commonly found in Ontario.

## Level Two (6561)

## Utility Arborist Workplace Safety II (ARB701) (2 credits)

Demonstrate a working knowledge of pertinent safety and related legislation as they apply to Utility Arboricultural safe workplace practices; and deal with potentially dangerous on-site conditions, emergencies, hazards and materials.

## Utility Arborist Theory II (ARB702) (3 credits)

Describe how to plan work safety, identify electrical hazards, identify other hazards outside of the electrical environment, use of various knot and hitches in the Utility Arboricultural trade, pruning and removing trees in proximity of electrical conductors, ascending, descending and performing an aerial rescue, rigging principals and hot to manage fire and dangerous goods.

## Utility Arborist Practices II - Tree Climbing (ARB703) (12 credits)

Demonstrate a knowledge of how to plan work safely, utilizing safe work practices, pruning and removing trees in proximity of electrical conductors, ascending, descending and performing aerial rescue, inspect, adjust and maintain personal protective equipment and fall protection equipment utilized in the Utility Arboricultural trade and managing fire, waste and dangerous goods.

## Utility Arborist Practices II - Aerial Device (ARB704) (3 credits)

Demonstrate a thorough working knowledge of aerial devices used in Utility Arboriculture practices.

# Utility Arborist Practices II-Brush Chippers/Aerial Devices (ARB705) (2 credits)

Demonstrate a thorough working knowledge of brush chippers and aerial devices used in Utility Arboricultural practices.

## Utility Arborist Sciences II (ARB706) (2 credits)

Demonstrate a knowledge of how to identify various woody plants, growth factors of woody plants, compartmentalization of woody plants, diseases and disorders of trees that could be harmful to the integrity of the electrical system, evaluate the condition of the anchor points in trees used for fall protection, evaluation of work operations within environmentally sensitive locations.

## Utility Arborist Hand Tools II (ARB707) (1 credits)

Demonstrate knowledge of how to select, adjust, maintain and store, tools and equipment commonly used in the Utility Arboricultural trade.

## Utility Arborist Tree Identification II (ARB708) (3 credits)

Demonstrate a thorough working knowledge of tree genera, species and cultivars by identifying 45 plants commonly found in Ontario.

## Utility Arborist Transmission Line Clearing II (ARB709) (2 credits)

Describe and demonstrate how to manage vegetation along transmission voltage corridors and right of

ways.

# Aircraft Structural Repair Technician

Section B.16 6/2/2020

**Ontario College Certificate (1 Year - 2 Semesters ) (4067)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

In partnership with Fanshawe College, this program is offered at the Norton Wolf School of Aviation Technology, London International Airport in London, ON.

This is an award winning Transport Canada accredited program (10 months) #TC - 2007-09-4093. Delivered in London, Ontario, the Aircraft Structural Repair program is on the leading edge of aircraft maintenance. As a student, you will gain the expertise, knowledge and understanding of both aircraft structural repair and manufacturing techniques that will help you succeed in the field through extensive hands-on training. Practical experience will be gained by completing 45 to 60 interesting projects that cover everything from aircraft fuselages and control surfaces to wings, composite panels, plastics and sealing procedures.

## **PROGRAM OUTCOMES**

# A graduate of the Sault College Aircraft Structural Repair Technician Program will reliably demonstrate the ability to:

- 1. Safely use the tools, equipment and identify materials needed to carry out various sheet metal repairs.
- 2. Demonstrate a working knowledge of the principles of aircraft design by applying theory and shop practice.
- 3. Identify and order airframe parts with the use of Maintenance and Parts Manuals to complete necessary repairs.
- 4. Read and follow blueprint, shop drawings and manufacturer's manuals necessary in all manufacturing and overhaul facilities.
- 5. Organize work safely, economically and efficiently.
- 6. Carry out any repair according to specifications, stated job procedures and the requirements of the Department of Transport Regulations.
- 7. Refer to specific aircraft manuals such as Aircraft Pocket Manual and Hardware Manual to determine safe and acceptable procedures and parts.
- 8. Demonstrate a sense of responsibility and appreciation of the high cost of the equipment and materials used to train the practical portion of this program.
- 9. Apply weight and balance formulas.
- 10. Recognize basic hand tools and demonstrate their use for specific maintenance on floats, fuselage structures and control systems.
- 11. With the use of manuals quickly locate and pinpoint station locations on fuselage construction and wing structures.
- 12. Use specialized equipment such as reamers, taps and dies to complete a detailed repair as per manufacturer's specifications.
- 13. Fabricate sheet metal parts with the use of shop equipment and manuals.
- 14. Apply Department of Transport regulations to paperwork and authorization licences to release aircraft back to service.
- 15. Fabricate float and hull repairs using specialized equipment for float repairs.

16. Demonstrate honesty and integrity to match the requirements of the aircraft industry.

### Reference

Sault College, Aircraft Structural Repair Technician Program Outcomes (MTCU 46600), September 1993.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C or mature student status.

# **CAREER PATHS**

As a graduate of the Aircraft Structural Repair program at Sault College, you'll be in high demand in a growing industry. Since our first graduating class of this program in 1992, industry growth, curriculum and training processes have all been developed to accommodate the needs of both the aircraft manufacturing and repair sectors. The highest demand for Aircraft Structural Repair graduates is currently in the repair, overhaul and modification of commercial aircraft in Canada, all of which you will learn to do in our program. You may then seek to find an exciting new career in your field of study by working with your program instructors and contacting potential employers locally and across Canada.

# **CERTIFICATIONS**

The program curriculum has been certified by Transport Canada as meeting CAR's 566 standards. Transport Canada's certification (TC#2007-09-4093) accredits graduates ten months toward an Aircraft Maintenance Engineer Licence ('S' rating). An 'S' rated AME licence can be obtained following an apprenticeship period and successfully completing Transport Canada's Regulatory Requirements exam.

Award! The program is a National Award Winner! In October 2003, Sault College's Aircraft Structural Repair program was named recipient of a prestigious Yves Landry Foundation Innovative Manufacturing Technology Program (College Level) Academic Award. It included a \$5,000 monetary component which was used to purchase new instructional equipment for the program. Founded in 1998, the Yves Landry Foundation is based on the vision, principles, and hopes of the late Yves Landry, Chairman, President, and CEO of Chrysler Canada Ltd. from 1990 to 1998. The Foundation focuses on `forging an enlightened partnership between industry and education, training a world-class pool of skilled manufacturing workers, technicians, technologists and engineers, and securing technological advantage in a rapidly changing world.`

## **OTHER INFORMATION**

#### This program will not be offered in the 2020 / 2021 Academic Calendar Year.

For more information contact:

- Devin York at 519-452-4430 ext. 6385 (email at: devin.york@saultcollege.ca)
- Paul Davis at 519-452-4430 ext. 6387 (email at: paul.davis@saultcollege.ca)
- Rosanna Wardell at 705-759-2554 ext. 2732(email at: rosanna.wardell@saultcollege.ca)

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

ASR100-2 Shop Management ASR101-4 Blueprint Reading ASR102-3 Mechanics of Flight ASR103-4 Aircraft Structures ASR105-2 Trade Calculations ASR113-2 General Hand Tools ASR115-2 Introduction to Composites ASR124-14 General Repairs I

#### **SEMESTER 2**

ASR107-3 Aircraft Systems ASR109-2 Plastics and Sealants ASR110-2 Non-Destructive Testing ASR111-2 Metallurgy and Heat Treating Processes ASR112-2 Canadian Aviation Regulations (CAR's) ASR126-8 Advanced Composites ASR128-12 General Repairs II

# **Course Descriptions**

#### Semester 1

#### Shop Management (ASR100) (2 credits)

This course introduces students to the Canadian Aviation Regulations that pertain to approved maintenance organizations. Shop safety is researched and demonstrated on both hand tools and shop equipment used in structural repair facilities. Emphasis is on paperwork, foreign object damage, approved maintenance organizations, human factors training and WHMIS.

#### Blueprint Reading (ASR101) (4 credits)

Using textbook assignments and in-class instructions, students will develop the skills to interpret, read and understand aircraft blueprints. Various aircraft company blueprints will be examined in group like sessions and presented by students. Terminology associated with these blueprints will also be researched and presented.

#### Mechanics of Flight (ASR102) (3 credits)

This course will introduce the student to fixed and rotary wing theory of flight, and flight control systems. In-class presentations include topics that pertain to how an airfoil produces lift, how airplanes and helicopters fly and the flight control systems used in fixed wing and rotary wing aircraft.

#### Aircraft Structures (ASR103) (4 credits)

Through the use of textbooks, video and in-class presentations, students will become familiar with the components used to construct fixed wing and rotary wing aircraft. Weight and balance procedures are researched and calculations for center of gravity are performed. The students will also become familiar with the different types of hardware used in the construction of modern aircraft.

#### Trade Calculations (ASR105) (2 credits)

This course studies the rules and procedures needed to obtain a complete understanding of modern technical mathematics as it applies to aircraft structural repair work. The participants will solve practical applied problems after studying and learning the fundamental concepts involved. Applied problems include layout work and bend calculations.

## General Hand Tools (ASR113) (2 credits)

This course consists of theory/practical work that is related to using the general hand tools needed for aircraft structural repair work. Following in-class presentations along with Instructor demonstrated techniques in the shop, the student will demonstrate the safe and proper way to use hand tools and precision measuring instruments.

## Introduction to Composites (ASR115) (2 credits)

This course will introduce the student to the modern composite materials and processes being used to manufacture and repair aircraft structural components. Shop safety and materials handling guidelines are included.

## General Repairs I (ASR124) (14 credits)

Students will research (using textbooks and repair manuals) the acceptable procedures used to perform repairs on the sheet metal structural components used in aircraft construction. Lab work will consist of honing riveting skills, installation and removal of fasteners, layout procedures and bend calculations. Processes such as countersinking, dimpling and micro-shaving are also completed. Evaluation consists of theory examinations (40%) and practical lab completions (60%).

#### Semester 2

## Aircraft Systems (ASR107) (3 credits)

In-class presentations are used to describe the various aircraft systems, their operation and the applicable servicing and maintenance tasks. Topics include fluid lines, aircraft cable construction, ice and rain protection, hydraulic systems, landing gear systems, fire protection and propulsion systems.

#### Plastics and Sealants (ASR109) (2 credits)

The proper methods used to manufacture and repair aircraft plexiglass parts will be learned through a combination of in-class theory and shop demonstrations. Various types of aircraft sealants will be researched and the application of sealants will be used as needed with certain lab projects.

## Non-Destructive Testing (ASR110) (2 credits)

The students will research and identify the types of non-destructive testing methods used by the aircraft industry. The advantages, disadvantages and procedures used to perform NDT will be discussed. Emphasis on Dye Penetrant, Magnetic Particle Inspection, Visual and Radiography inspection procedures will be addressed.

## Metallurgy and Heat Treating Processes (ASR111) (2 credits)

Metallurgy is the study of metals, their properties and pertaining to aircraft - their structural applications. The student will also become familiar with the different heat treating processes used to improve these metals for aircraft structural use. Topics include ferrous and non-ferrous metals, heat treatment processes for aircraft steels and aluminum alloys and mechanical properties - hardness testing.

## Canadian Aviation Regulations (CAR's) (ASR112) (2 credits)

In this course, students will be introduced to the various sections found in Transport Canada's Aviation Regulations. The Canadian Aviation Regulations (CAR's) will be studied and discussed to give the student a clear understanding of the regulations that must be followed in Canada's aviation industry. Topics include all applicable regulations, technical records, aeronautical publications and paperwork forms.

#### Advanced Composites (ASR126) (8 credits)

This course is comprised of theory/practical work related to the manufacturing and repair of aircraft composite parts. Advanced composite materials, manufacturing techniques and repair methods will be used by the student to build and repair aircraft structural components. All practical 'hands on' work will take place in a modern, well equipped composites lab.

#### General Repairs II (ASR128) (12 credits)

This course is an advanced version of ASR124 (General Repairs I). The students will research and perform repairs on the following aircraft structural parts: stringers, formers, bulkheads, spars, outer skin covering, control surfaces, tubular structures, wooden structures and fabric coverings. The curriculum topics and lab projects associated with corrosion assessment-removal and protection, jigs, forming tools, static balancing of control surfaces, turn lock fasteners, window removal and installation, plexiglass repairs and sealing procedures must be completed. Most repairs involve forming aluminium alloy from flat stock. Evaluation consists of theory testing (40%) and practical project completions (60%).

# Aviation Technology - Flight

**Ontario College Advanced Diploma (3 years - 7 Semesters ) (4061)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



Section B.17

# **PROGRAM OVERVIEW**

Considered one of the best flight schools in Canada, Sault College's Aviation Technology - Flight program will prepare you for an exhilarating career as a professional pilot with positions available around the globe. Graduates of the program who meet qualification criteria established by Transport Canada, will have successfully completed the requirements for the Integrated Commercial Pilot License Aeroplane, including the multi-engine instrument rating (CPL(A)IR). This licence meets all the requirements for you to be a commercial pilot. Individuals with previous flight training start with a modified flight training program in the beginning; however, all students will be at the same level by second year. Students gain hands-on training with our impressive fleet of aircraft, includingten Zlin and two Seminole Piper planes complemented by new state-of-the-art flight simulators, that will provide you with a realistic experience that closely replicates flying in one of our College's airplanes. Each aircraft includes advanced radio navigation systems and real-time aircraft tracking systems.

Please note, this program is not open to international students at this time, for more information please contact us at: <u>international@saultcollege.ca</u>.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Applicants must have an Ontario Secondary School Diploma (OSSD), or be studying in their final year of their OSSD, and have successfully completed, or be in progress to complete the following course:

- Grade 12 English, College Preparation (ENG4C)

- substitute is Grade 12 English, University Preparation (ENG4U)

- Grade 12 Mathematics for College Technology (MCT4C)

- Substitutes are Advanced Functions, University Preparation (MHF4U) or Calculus and Vectors, University Preparation (MCV4U)

- Grade 12 Physics, College Preparation (SPH4C)

- Substitute are Grade 12 Physics, University Preparation (SPH4U), or Grade 11 Physics, University Preparation (SPH3U)

Applicants must provide a Transport Canada Category 1 Medical Certificate to the Sault College Registrar's Office by August 1st of their entry year. This medical certificate must remain active for the duration of studies.

Please contact the Registrar's Office for the criteria used to rank applicants should the program be oversubscribed.

After being accepted to the Aviation Technology - Flight program, only those students who successfully complete all courses in the first semester will be admitted to the second semester (which includes the

commencement of flight training). Students who do not successfully complete all courses in the first semester and/or Flight Training I (AFT 120) in the second semester of study, will be withdrawn from the program and invited to re-apply for the next intake of this program. Students who are re-admitted will be required to maintain a full-time course load and re-take all Transport Canada approved ground school courses, in addition to any previously failed courses. Students who hold, or have held, a Commercial Pilot License, Aeroplane are not eligible for acceptance into the Sault College Aviation program. Students who hold a Private Pilot License will participate in a modified flight program in Semesters 2 and 3 as compared to those who do not have any flying experience.

## ACADEMIC RECOMMENDATIONS

Applicants are strongly encouraged to acquire several hours of flight training at a recognized flying school - preferably to the solo level - before commencing the program. This is to ensure that the experience of flying in light aircraft is agreeable to the applicant.

Please visit <u>What You'll Need</u> for admission requirements and important program progression information.

# **CAREER PATHS**

The employment picture for pilots, as with any other occupation, can and does change from time to time depending on the supply and demand. Graduates may look ahead to careers as flight instructors, charter pilots, corporate pilots, and have the ultimate goal of flying for a major airline. Students studying in Sault College's Aviation Technology Flight Advanced Diploma program may receive advanced standing from Algoma University, subject to entrance requirements, towards a Bachelor of Business Administration program. For more information on this opportunity please contact Algoma University.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$8,523.30	\$1,748.00	N/A	N/A

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# MEDICAL REQUIREMENTS

Final acceptance into the program is contingent upon satisfactory medical records filed with the College. This includes a photocopy of a **Transport Canada Category I medical certificate** and a photocopy of a **Canadian birth certificate** or a **Citizenship document** showing date of birth. The Category 1 medical may be obtained from any Canadian Aviation Medical Examiner. A list of doctors is available on Transport Canada's web site. Note: Upon arrival to the College, the originals of these documents must be produced in order to facilitate licencing. For students who currently hold a Canadian Pilot Licence or Permit, a copy of the Licence/Permit must be submitted. Students must renew their Category I medical certificate prior to writing the Transport Canada Commercial Written exam in Semester 5. Due to the Canadian Air Regulations (CARs) and the College's aircraft manufacturer's specifications, all pilots are required to adhere to weight and balance restrictions. These weight restrictions are accessible in the manufacturer's pilot operating handbook, copies of which are readily accessible at both the College and College airport hangar

### locations.

**Proof of English Language Proficiency** - With English being the international language of aviation, all training in the Sault College aviation program is conducted in English. Transport Canada, the industry regulator, requires aviation license candidates to demonstrate an expert level proficiency in English.

Canadian citizens who have graduated from a Canadian English or French speaking high school and, those who can provide evidence that they have completed their studies in either English or French will qualify for the informal demonstration in the language indicated on their high school diploma; provided the Chief Flight Instructor (CFI) of a Flight Training Unit (FTU) is satisfied that the person can demonstrate the competencies of Expert Level 6 as listed in standard 421.06(4) of the CARs. If there is any uncertainty as to whether the student is to the expert level 6 standard, the CFI will request a formal aviation language assessment. It is important to note that this assessment for Sault College students, if required, will be completed in English only.

If the applicant or student is uncertain that they are at an expert level, they can request a meeting with the CFI to discuss.

Sault College reserves the right to have the student conduct a formal aviation language proficiency demonstration.

# **DRESS CODE**

Professional Pilots are well groomed and properly dressed. Since students at Sault College are working towards becoming Professional Pilots, they should also be well groomed and properly dressed. Dress code will be observed at the college up to 1700hrs during week days and at all times at the Hangar. Activities, such as tests after 1700hrs or weekend non-flying activities, will be at the discretion of the professor. The following dress code guidelines will be observed:

## Hair

- Facial hair other than for religious reasons shall be neatly trimmed and maintained (to reflect professionalism).
- Hair is to be clean and groomed at all times.
- While flying, hair shall be neatly pulled back so as not to obstruct vision including peripheral vision.
- Hairstyle must be such that it does not draw undue attention. Radical hairstyles or colouring are not allowed.

## Attire Mandatory for all post May 2016 graduates

• The Colleges aviation uniform (available via the colleges bookstore) shall be worn. It consists of a white pilot shirt embroidered with the Sault College Aviation logo, dark blue dress pants and a matching blue tie. During winter operations, a matching dark blue sweater also embroidered with the college logo can be worn overtop the pilot shirt and tie. The shirt must be tucked in at all times. For summer flight operations see section 6.1.3 Summer Operations. Casual or dress socks shall be worn. No athletic socks.No running shoes are allowed. Leather shoes are preferable for classroom work and hiking boots are a good choice when flying. During the winter months, proper boots either need to be worn or be on board the aircraft. High heels are a hazard to the operation of the rudder pedals and not allowed in the aircraft.Wrist jewellery that can catch on switches or controls not allowed.Ball caps are only to be worn in the aircraft for the purpose of shading eyes from the sun. They shall be worn straight and are not to be worn indoors at the College or at the Hangar.

• Personal hygiene shall be a priority. Students will spend a large amount of time in close proximity to other students and their instructors. Excessive use of cologne, perfume, body spray, and aftershaves is as offensive or distracting as poor hygiene. Make up is to be conservative. Fingernails shall not be unreasonably long. Earrings shall be limited to one per ear and must be small enough to not interfere with an aviation headset. (Studs vs. hoops would be preferable.)

## Winter Operations

Pilots must dress for survival for every flight, even local flights, winter and summer. If an aircraft was to make a forced landing in winter, the pilot and passengers must be prepared to, at the very minimum, spend the night in the woods. The chances of survival, even in the fall and spring, will be greatly diminished if proper clothing is not worn. For winter flying, the following is a minimum list:

• A winter parka, or at the very minimum a good quality ski jacket with at least one additional layer of a wool or fleece sweater. The heavy coat is not usually worn while flying, but must be present in the aircraft.Winter underwear or in its absence, ski pants on board the aircraft. Proper winter boots either worn or on board the aircraft. A proper winter hat such as a wool cap, and good quality gloves or mittens

#### **Summer Operations**

• At the discretion of the duty pilot, ties may be removed during very hot days.College issued aviation polo shirts may be worn in lieu of shirt and tie during the summer semester. (May 1st until September 1st).

This Dress and appearance code complies with the Human Rights Standards of Canada.

# **OTHER INFORMATION**

For More Information Contact:

John Portas: John.Portas@saultcollege.ca at ext: 2518.

## **PROGRAM OF STUDY**

## SEMESTER 1

AVF111-2 Meteorology I & II AVF115-2 Airframes, Engines and Zlin Systems AVF117-2 Flight Theory and Operations AVT119-2 Human Factors in Aviation CMM115-3 Communications I MTH612-4 Mathematics PHY125-4 Physics GEN100-3 Global Citizenship

## **SEMESTER 2**

AFT120-2 Flight Training I AVF122-2 Navigation I & II AVT123-1 Air Law I ELR104-3 Electrical Fundamentals MCH298-4 Applied Mechanics MTH613-4 Technical Mathematics REC106-3 Fitness and Lifestyle Management

## **SEMESTER 3**

AFT130-15 Flight Training II

## **SEMESTER 4**

AFT240-9 Flight Training III AVF241-2 Meteorology III AVF242-2 Navigation III AVF245-2 Airframes and Engines II AVT248-2 Human Factors in Flight ELN224-3 Digital Electronics and Avionics MCH111-4 Applied Mechanics MTH626-4 Calculus

## **SEMESTER 5**

AFT250-9 Flight Training IV AVT252-1 Navigation IV AVT253-1 Air Law III AVT257-1 General Knowledge for Aviation AVT259-1 Instrument Procedures CMM210-3 Technical Communication MCH221-4 Hydraulics Systems MTH654-4 Technical Mathematics

## **SEMESTER 6**

AFT360-9 Flight Training V AVT361-3 Meteorology IV AVT363-2 Advanced Flight Systems AVT364-3 Aerodynamics AVT366-2 Aircraft Systems Preparation for Flight AVT369-3 Navigation and Instrument Procedures CMM400-3 Advanced Communication for Aviation

# **SEMESTER 7**

AFT370-9 Flight Training VI AVT370-2 Instructional Techniques AVT375-4 Airframes, Engines and Maintenance Requirements AVT377-2 Flight Operations AVT378-3 Safety and Human Factors

## Select one of the following:

GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **Course Descriptions**

## Semester 1

Meteorology I & II (AVF111) (2 credits)

This course prepares pilots-in-training for writing the meteorology section of the Transport Canada Private Pilot written exam as well as enabling them to interpret weather reports and forecasts in preparation for

flight. To provide a solid foundation for making good weather decisions, meteorology theory is covered in detail. This course also provides the foundation for meteorology in second and third year of the Aviation Program.

## Airframes, Engines and Zlin Systems (AVF115) (2 credits)

A study of the topics necessary to determine that an aircraft is ready for flight, including an overview of airframes and engines and a study of the systems and performance for the aircraft used for flight training, documents and airworthiness, dispatch procedures, record keeping, weight and balance, servicing and elementary maintenance).

## Flight Theory and Operations (AVF117) (2 credits)

An introductory course in aircraft performance. The course introduces the student to basic aerodynamic principles and their underlying theories and how theory translates into practical applications with the use of performance charts for estimating cruise, range, endurance, take off and landing performance. Other performance areas include power and thrust, load and stress analysis, design characteristics of various airplane categories and the need to design economically efficient air transportation.

The course also introduces cockpit instrumentation and the pilots need to understand and interpret airplane performance during normal and abnormal maneuvers and an appreciation of the operating limitations of traditional instrumentation.

## Human Factors in Aviation (AVT119) (2 credits)

Students enrolled in the aviation technology (flight) program will participate in 3 human factor courses. This, the first course, provides an introduction to human factors with a focus on basic flight physiology. You will learn why human factors are so important and the role they will play in your career. The topics covered include: basic human anatomy, hearing, vision, altitude physiology, the atmosphere, sleep and circadian rhythms, stress, situational awareness and orientation, acceleration and motion sickness.

## Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Mathematics (MTH612) (4 credits)

Students will develop skills needed to solve problems in technical mathematics. Topics include a detailed review of algebra followed by a study of quadratic equations, exponential and logarithmic functions and trigonometric functions.

## Physics (PHY125) (4 credits)

Topics included are properties of fluids, forces, and pressure involved in hydrostatics and hydraulics, wave motion and propagation, properties and intensity levels of sounds.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a

socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 2

## Flight Training I (AFT120) (2 credits)

This course is the introduction to flight training. For students with or without a private pilot licence, training will involve the first solo stage of flight training. Additionally, students will write the Sault College Private Qualification Exam in order to qualify for writing the Transport Canada Written Exam (PPAER).

## Navigation I & II (AVF122) (2 credits)

This course starts with the basic elements involved in Dead Reckoning Navigation. These elements are then combined to enable pilots-in-training to pass the navigation section of the Transport Canada Private Pilot written exam and to learn the techniques that pilots use for navigating in flight. This knowledge is also the basis for the Transport Canada Commercial Written exam in second year, and is also preparatory ground instruction for the Private Pilot Licence.

## Air Law I (AVT123) (1 credits)

This course provides the base understanding of the regulatory agencies and their role in overseeing all aspects of flying. Topics include basic rules of flight manoeuvring, airspace classification, airport operations, medical and licensing requirements, and various safety related issues, such as oxygen requirements and marginal weather conditions.

## Electrical Fundamentals (ELR104) (3 credits)

Fundamental principles of direct and alternating current theory, are studied including Ohm's Law, series and parallel circuits, power, electrical instruments, inductance and capacitance, magnetic fields, reactance and impedance.

## Applied Mechanics (MCH298) (4 credits)

This course entails a thorough study of statics, providing fundamental skill for further development in mechanical studies. Topics include: force vectors, components, resultants, moments, couples, equilibrium in force systems, trusses and frames, centrolds, friction laws, impending motion, centroids and centers of gravity

## Technical Mathematics (MTH613) (4 credits)

The course includes topics in Plane Analytic Geometry, introduction to Calculus including derivatives and integration of algebraic functions; applications of integration.

# Fitness and Lifestyle Management (REC106) (3 credits)

This course deals with the pursuit of wellness with a focus on physical fitness. Topics include: positive lifestyle choices, self-management and behaviour change techniques, exercise prescription, fitness training methods and body fat management. Students are introduced to a variety of fitness activities known to maximize health benefits while providing lifelong appeal.

## Semester 3

# Flight Training II (AFT130) (15 credits)

This course carries on from the flying done in AFT120 up to the Private Pilot Flight Test for Abinitio students, or a final flight test for those with Private Pilot licences. After this stage, a series of cross-country flights will be done.

### Semester 4

## Flight Training III (AFT240) (9 credits)

This course involves flight training in preparation for the VFR Navigation Progress Test and is part of the time building required for the Commercial Flight Test. A major component of this semester is basic instrument flight and radio navigation. The Night Endorsement is also completed in this semester.

## Meteorology III (AVF241) (2 credits)

This course reviews the theory and meteorological services for pilots learned in first year meteorology, and explore more advanced theory in preparation for writing the Transport Canada Commercial Written Exam (CPAER).

### Navigation III (AVF242) (2 credits)

This course provides the preparatory ground instruction for radio navigation using VOR, ADF and GPS navigation aids. This is in preparation for the skills required for the Transportation Canada Commercial Flight Test.

## Airframes and Engines II (AVF245) (2 credits)

A study of engines and airframes including the internal combustion engine and the basic gas turbine engine, fuels and fuel systems, lubrication and oil, ignition systems, engine instruments, propellers, airframes, and electrical systems at the Commercial Pilot Level.

#### Human Factors in Flight (AVT248) (2 credits)

This is the second of three human factors courses you take in the aviation program. You will learn how psychological and physiological factors play an important role in flight safety. Some of the topics included are pilot decision-making, human error, communications and attitudes in aviation.

#### Digital Electronics and Avionics (ELN224) (3 credits)

This course is a study of modern digital devices and circuits. The student will study Digital Numbering Systems, Boolean algebra, common Digital Integrated circuits, as well as other pulse shaping/generating circuits. Emphasis will be placed on the analysis and troubleshooting of these devices and circuits. Rounding out the course is an application component covering the flight instruments and electronic circuits, which produce transmit and condition analog and digital signals.

## Applied Mechanics (MCH111) (4 credits)

This course advances the study of mechanics into the area of dynamics. Topics include: KINEMATICS (uniformly accelerated motion, projectile motion, circular motion; Newton's Second Law rectilinear and angular motion), inertia, dynamic equilibrium (work, energy forms, power, efficiency), impulse and momentum (linear and angular), dynamic friction.

#### Calculus (MTH626) (4 credits)

This course is a continuation of MTH613 and provides the student with a more advanced study of calculus. Topics of study include differentiation and integration of algebraic, trigonometric, exponential and logarithmic functions with an emphasis on applications.

#### Semester 5

## Flight Training IV (AFT250) (9 credits)

This course involves the improving of skills and building of flight time in preparation for the Transport Canada Commercial Flight Test. Also part of this course is writing the Sault College Qualification Exam in order to qualify for writing the Transport Canada Commercial Written exam (CPAER).

#### Navigation IV (AVT252) (1 credits)

This course explores the remainder of the radio navigation aids not covered in AVT242 and puts to practice radio navigation as well as dead reckoning skills in preparation for writing the Transport Canada

## Commercial Written Exam (CPEAR).

## Air Law III (AVT253) (1 credits)

This course reviews all of the general regulations plus those sections of the Canadian Air Regulations specific to Air Taxi operations. The course is designed to familiarize the students with regulations governing ground operations, personnel qualifications, and aircraft equipment requirements and training programs for Air Taxi Operations.

## General Knowledge for Aviation (AVT257) (1 credits)

This course expands on the general knowledge of theory, aerodynamics, engines, airframes and instruments with a quantitative analysis and greater depth. Other topics relate to formulae and performance charts dealing with weight and balance, cruise performance, multi-engine operations, unusual attitudes, recognition of system failures and emergency procedures.

#### Instrument Procedures (AVT259) (1 credits)

This course covers the rules and procedures for all aspects of flight in instrument meteorological conditions. Topics covered are general flight Rules, departure, Enroute, arrival and holding procedures. An emphasis is placed on sourcing all course material from official government publications such as the AIP and CARs.

## Technical Communication (CMM210) (3 credits)

This course provides training in technical communication. Emphasis is given to memos, letters, forms, and reports. Oral reporting and its importance on the job are also included. The effective use of computers to research and generate technical documents is an essential component of this course. The theory of writing is taught through the writing process.

#### Hydraulics Systems (MCH221) (4 credits)

Areas to be studied are as follows: basic theory of hydraulics, theory and assembly of pumps, pressure control valves, directional valves, flow control valves, circuits, and troubleshooting simple systems related to aircraft.

## Technical Mathematics (MTH654) (4 credits)

This course is a continuation of MTH626 and provides the student with a more advanced study of calculus. Topics of study include methods of integration, first and second order differential equations and series expansions.

#### Semester 6

## Flight Training V (AFT360) (9 credits)

This course involves the Group 3 IFR training (single engine), culminating with the IFR Progress flight check. Additionally the Multi-Engine Class Rating training and flight test is completed.

## Meteorology IV (AVT361) (3 credits)

This course reviews meteorology theory already learned, and explores the methods of using meteorological services available to pilots to prepare for an IFR flight. More advanced theory is also introduced. This course is in preparation for writing the Transport Canada Instrument Rating Exam (INRAT).

## Advanced Flight Systems (AVT363) (2 credits)

Part 1 of this course covers the description and operation of a Flight Management System. The integration of the Flight Management System (FMS) with aircraft systems and the benefits for the air carrier and pilots will be studied. Part 2 of this course will cover the description and benefits of the Electronic Flight Information system of the Canadair Regional Jet.

## Aerodynamics (AVT364) (3 credits)

This course expands on the basic concepts of lift/drag, stability, performance and high-speed flight, thrust

and power performance. The emphasis is on applying a more mathematical treatment to quantify the analysis of aerodynamics. The course combines science and a practical operational approach that is understandable from the standpoint of a pilot.

## Aircraft Systems Preparation for Flight (AVT366) (2 credits)

A study of electrical hydraulic, fuel, oil, oxygen, and fire fighting systems in the aircraft used for multi-engine training as well as in a modern, turbine, pressurized transport aircraft.

## Navigation and Instrument Procedures (AVT369) (3 credits)

This course provides for you to incorporate the knowledge acquired from AVT259 into practical navigation exercises required for IFR flight. Included will be the review of basic instrument flying, instrumentation, navigation systems and physiological factors.

# Advanced Communication for Aviation (CMM400) (3 credits)

This course provides advanced training for aviation students in the organization and presentation of information, using a teamwork approach. Emphasis will be placed on recognizing audience needs, using persuasive techniques, practicing interpersonal skills, and enhancing presentation skills. A major component of the course will consist of career exploration, preparation of a resume and cover letter, and interview skills.

## Semester 7

## Flight Training VI (AFT370) (9 credits)

The main emphasis in this semester of flight training is the Group I IFR rating (Multi-engine), culminating with the Transport Canada Group I IFR flight test.

## Instructional Techniques (AVT370) (2 credits)

A study of the principles of leaning and techniques of instruction and a review of theory of flight and general aviation knowledge, leading to the Transport Canada Flight Instructor Endorsement Examination. In addition, students will participate in classroom exercises to gain experience in giving preparatory instruction and pre/post flight briefings.

## Airframes, Engines and Maintenance Requirements (AVT375) (4 credits)

A study of airframes and engines including the internal combustion engine and the basic gas turbine engine, fuels and fuel systems, lubrication and oil, ignition systems, engine instruments, propellers, airframes. Also study of aircraft maintenance requirements to the level required of a Person Responsible for Maintenance (PRM) for an Air Operator.

## Flight Operations (AVT377) (2 credits)

AVT377 has two components to it. First you will complete navigation and instrument procedures (AVT369), which includes passing the INRAT. Second you will learn aspects of flight operations, which will help prepare you for the knowledge portion of your ATPL and your career as a professional pilot.

## Safety and Human Factors (AVT378) (3 credits)

This is the third human factors course. You will continue to develop the skills required for a safe and successful mission. Some of the topics covered are judgment and decision-making, error analyses using Reason's model, safety management program and two crew operations.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Business

Ontario College Diploma (2 Years - 4 Semesters ) (2035) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



Section B.18

# **PROGRAM OVERVIEW**

Sault College's Business program has ranked higher than the provincial program average in student satisfaction over the past two years, making it an excellent investment in your future career. In 2014, the program received 100% satisfaction from our grads.

Our Business program specializes in providing you with the best education possible in the competitive world of business. Sault College's unique geographic location, bordering the United States, allows us the opportunity to provide a global perspective to the important study of business. Our well-respected instructors, guest speakers, and curriculum integrate the use of current technologies and innovative software in a simulation of the real world of business, giving you the edge you need to succeed. You can rest assured that the Business program will provide you with a unique set of skills that are in increasing demand and highly regarded by the business community. At Sault College, preparing you for a successful career is Our Business.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

Business students can now take advantage of our 2 + 2 Partnerships. Follow our diploma to degree pathways to earn your University degree. For more information <u>click here</u>!

#### **PROGRAM OUTCOMES**

## A graduate of the Business Program at Sault College will reliably demonstrate the ability to:

- 1. identify and discuss the impact of global issues on an organizations business opportunities by using an environmental scan.
- 2. apply principles of corporate sustainability, corporate social responsibility and ethics to support an organizations business initiatives.
- 3. use current concepts/systems and technologies to support an organization's business initiatives.
- 4. apply basic research skills to support business decision making.
- 5. support the planning, implementation and monitoring of projects.
- 6. perform work in compliance with relevant statutes, regulations and business practices.
- 7. explain the role of the human resource function and its impact on an organization.
- 8. use accounting and financial principles to support the operations of an organization.
- 9. describe and apply marketing and sales concepts used to support the operations of an organization.
- 10. outline principles of supply chain management and operations management.
- 11. outline and assess the components of a business plan.
- 12. develop strategies for ongoing personal and professional development to enhance work performance in the business field.

#### <u>Reference</u>

Ministry of Training, Colleges and Universities, Business Program Standards (MTCU 50200, December 2012)

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C and Grade 11 Foundations for College Math (C) MBF3C or mature student status.

# **CAREER PATHS**

Our Graduates gain employment in a number of varied positions in the service, public and retail sector of the economy. A number of our graduates pursue their own businesses. Recent graduates are employed in: Marketing, Banking, Sales, Real Estate/Appraisal, Finance, Insurance, Customer Service, Accounting, Purchasing, and Management.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **EDUCATIONAL PATHS**

Graduates of the Business, Business Management or Business?Accounting programs may seek to pursue further study at local universities including Algoma University and Lake Superior State University (Sault Ste. Marie, Michigan) to obtain a Bachelor Degree in Business or Accounting. Please contact Algoma University or Lake Superior State University for more information on transfer and entrance requirements for each post-secondary institution.For opportunities for further study at other Canadian post-secondary institutions, please contact the College or University of your choice.

# **OTHER INFORMATION**

\*\*September and January intakes are available for this program. Please contact the Registrar`s Office for further information.\*\*

For more information contact Program Coordinator John Cavaliere at 705.759.2554 ext 2764 or email john.cavaliere@saultcollege.ca.

# **PROGRAM OF STUDY**

**SEMESTER 1** BCA101-4 Introduction to Financial Accounting BCG101-3 Introduction to Business Concepts BCH101-3 Introduction to Human Resources BCM101-3 Introduction to Marketing BCO101-4 Business Math BCO118-3 Computer Applications for Business I CMM115-3 Communications I

## **SEMESTER 2**

BCA209-4 Managerial Accounting BCM102-3 Marketing 2 BCO105-4 Business Math 2 BCO106-3 Microeconomics BCO119-3 Computer Applications for Business II CMM215-3 Business Communication GEN100-3 Global Citizenship

## **SEMESTER 3**

BCG205-4 Operations Management BCH102-3 Organizational Behaviour BCM203-3 Professional Selling BCO207-3 Macroeconomics BCO208-4 Statistics BUS228-3 Small Business Management

## **SEMESTER 4**

BCG202-4 Finance I BCG203-3 Entrepreneurship BCG204-3 Business Law BCG206-3 Corporate Social Responsibility BCG207-4 Business Simulation BCG307-3 Project Management

#### Select one of the following:

GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **Course Descriptions**

#### Semester 1

## Introduction to Financial Accounting (BCA101) (4 credits)

In this course, students will be introduced to the accounting cycle and the preparation of financial statements. Topics include recording entries, preparing financial statements and accounting for merchandising activities. This course will be essential for further study in financial accounting.

## Introduction to Business Concepts (BCG101) (3 credits)

In this course, students will be introduced to business in Canada, focusing on introductory topics for those interested in employment in a business management role. Topics of study will include the relationships between the areas of finance, human resources, marketing, and operations within an organization,

business ethics and social responsibility, management concepts and practices, and an exploration of the entrepreneurial spirit.

## Introduction to Human Resources (BCH101) (3 credits)

In this course, students will learn how proper recruitment/selection strategies, and training and development methods, maintain an organization's competitive advantage. The integral role of job design and analysis in affecting compensation management and performance appraisal decisions will be examined. Students will investigate a variety of employment and health and safety laws as they relate to managing a diverse workforce. In addition, the fundamental principles of the union-management framework will be explored.

## Introduction to Marketing (BCM101) (3 credits)

This course is an informative introduction into marketing. Students will become acquainted with current Canadian marketing concepts, terminology and practices, examine strategies to apply them to contemporary marketing situations, and gain an understanding of how they affect an organizations profitability. Students will also explore consumer and business marketing, product planning, building customer relationships and creating customer value. This course provides a basic understanding of Canadian marketing structures and techniques including defining and segmenting target markets and interpreting market research data.

## Business Math (BCO101) (4 credits)

In this course, students will begin with a review of basic arithmetic and algebraic manipulations, continuing with the following topics: ratios and proportions, percentages and the percentage formula, discounts, mark-ups and mark-downs, payroll scenarios, break-even analysis, and simple interest.

## Computer Applications for Business I (BCO118) (3 credits)

In this course, students will have exposure to a comprehensive Windows-based financial spreadsheet package to enhance their problem solving abilities. The package used will be Microsoft Excel 2010 for Windows. The student will use this as a tool to prepare various reports and presentations, and applications which can be transferred in work commonly performed in the modern office. Students will gain hands-on experience in learning and understanding the software, as well as creating and developing spreadsheet applications. Students will develop and enhance spreadsheets, charts, data lists, tables, macros and perform what-if analysis.

## Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Semester 2

# Managerial Accounting (BCA209) (4 credits)

In this course, students will learn how to effectively use the accounting information that is required by managers to plan, direct, and control the operations of their business organization. Students will gain an understanding of managerial accounting data pertaining to cost systems, cost behaviour, cost-volume-profit relationships, decision-making, and budgeting.

## Marketing 2 (BCM102) (3 credits)

This course builds on the foundation of BCM101 Introduction to Marketing. Students will continue to examine current Canadian material on marketing and determine strategies for developing new products and services that are consistent with evolving marketing needs and principles of sustainability. Students will apply their knowledge in producing a marketing plan where they will set marketing objectives, develop a marketing mix, along with developing marketing strategies. Budgetary considerations will be taken into account, and evaluation criteria identified. Students will also contribute to the development of pricing strategies and participate in conducting market research to provide information needed to make marketing decisions. The development of analytical marketing skills will be emphasized through the use of problems and case studies.

## Business Math 2 (BCO105) (4 credits)

In this course, students will develop their skills and understanding of business mathematics involving interest calculations, compound interest, annuities, loan financing, bonds and investment decision making.

## Microeconomics (BCO106) (3 credits)

In this course, students will discuss small-scale economic phenomena. Students will examine the behaviours of individuals, households, firms, industries, and resource owners. Further, they will review the explanations for such things as prices and output of firms, and the choices of consumers in buying goods and services. Finally, they will examine technological change, costs, competitions and adjustments of markets to new conditions.

## Computer Applications for Business II (BCO119) (3 credits)

This course introduces students to Computerized Financial Management applications used by managers, supervisors and employees in the daily operational decision-making process. Students will gain practical hands-on experience recording business transactions in the General Ledger, Receivables, Payables, Payroll, Inventory and Banking modules. Students will also calculate and account for sales taxes.

## Business Communication (CMM215) (3 credits)

This course provides employment-related theory and practice in those written and oral reporting skills typical of a modern business or institution. The principles of writing are taught through the writing process.

## **Global Citizenship** (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 3

## **Operations Management** (BCG205) (4 credits)

In this course, students will examine issues concerned with the conversion of inputs into goods and services by business and industry. Students will gain insights into how goods and services are provided and will learn how to solve some of the problems that are involved in the field of operations management.

## Organizational Behaviour (BCH102) (3 credits)

In this course, students will assess the impacts of human behaviour on organizational performance through the study of personal values and perceptions, motivational techniques, effective utilization of teamwork, conflict resolution options, negotiation processes, leadership styles, approaches to decision-making, options for organizational structure, and change management. Students will learn to predict potential impacts of human resources policies and practices on employee behaviour as well as recommend management practices to effectively address specific employee behaviours.

## Professional Selling (BCM203) (3 credits)

This course will explore the world of building relationships in the sales field. Students will examine the steps in the preparation, presentation and the follow-up of a professional sale.

This course deals with a hands-on approach to developing the tools to be successful in most selling situations. Emphasis is placed on building a relationship based on rapport and trust. Students learn and practice the fundamentals of the sales process including needs analysis, preparing sales presentations, handling objectives, confirming and closing the sale, and the strategic importance of follow-up and providing exceptional customer service. Throughout the course role playing and case studies will be utilized to allow students to apply sound reasoning skills to solve sales challenges.

## Macroeconomics (BCO207) (3 credits)

In this course, students will discuss large-scale economic phenomena. Students will examine the behaviours of individual nations in a global economics context. Further, they will review the explanations for such things as prices and output in aggregate for an entire economy. Finally, they will examine technological change, global trade and the effect of tariffs.

## Statistics (BCO208) (4 credits)

In this course, students will develop the necessary mathematical skills for conducting descriptive and inferential statistical analyses with business applications. Topics will include data description and presentation, probability, probability distributions, sampling distributions, estimation, hypothesis testing, regression and correlation.

## Small Business Management (BUS228) (3 credits)

This course introduces the student to the study of contemporary management skills required to manage small businesses. Students will examine the role of management, identify effective management, and explore techniques aimed at improving management skills in an ever-changing business environment.

## Semester 4

Finance I (BCG202) (4 credits)

In this course, students will examine the goals and objectives of financial management with an emphasis on decision making. Students will evaluate data to prepare estimates, apply working capital management techniques, evaluate sources of short-term financing, calculate value and rate of return, and calculate the cost of capital.

## Entrepreneurship (BCG203) (3 credits)

This course introduces students to the nature of business and entrepreneurship. Students will obtain an overview of entrepreneurship and the entrepreneurial process then expand into key concepts including business types, customers, marketing, financials and human resources. The options of franchising and purchasing existing businesses are also covered in this course. Students will outline and assess the

components of a Business Plan.

## Business Law (BCG204) (3 credits)

This course presents a practical study of Canadian business law, including the legal and administrative systems, torts, contracts, employment laws, and general legal considerations that arise for a business. In addition, students will assess intellectual property, patent, trademark, copyright, and franchising laws and apply them to business cases.

## Corporate Social Responsibility (BCG206) (3 credits)

In this course, students will study the impact which corporations have on the environment, employees, communities, and stakeholders and will examine related ethical issues and concerns in these areas. Students will define good corporate citizenship and will look at government and private legislation/regulations which aim to make corporations socially accountable. Various approaches to Corporate Social Responsibility (CSR) and CSR policies will be reviewed and assessed.

## Business Simulation (BCG207) (4 credits)

Students will utilize the knowledge relating to business activities gained through the curriculum. Students will apply their business knowledge in a simulated business environment to test their ability as a business owner/manager.

## Project Management (BCG307) (3 credits)

In this course, students will assess the impacts of human behaviour on organizational performance through the study of personal values and perceptions, motivational techniques, effective utilization of teamwork, conflict resolution options, negotiation processes, leadership styles, approaches to decision-making, options for organizational structure, and change management. Students will learn to predict potential impacts of human resources policies and practices on employee behaviour as well as recommend management practices to effectively address specific employee behaviours.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# **Business - Accounting**

**Ontario College Diploma (2 Years - 4 Semesters ) (2050)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

The focus of the Business - Accounting program is to prepare you for the important role of a successful and in-demand operational management accountant. The Sault College Accounting program is part of the well-established School of Business and provides in-depth application of traditional and computerized accounting concepts that are continually called upon in any industry or organization. Well-respected faculty with both accounting designations and years of experience in the accounting profession, deliver engaging lectures that have been highly rated by students and graduates of the program, sharing the knowledge you need to learn in ways that make sense to you. The program is continually changing to be responsive to industry needs and to meet the demands of the students seeking career opportunities and advancement in a business environment, while adhering to the well-regarded Ministry of Training, Colleges and Universities standards for Accounting. If you graduate from our 2-year Business - Accounting diploma program, you can seek to pursue further study at local and regional Universities including Algoma University, Laurentian University and Lake Superior State University (Sault Ste. Marie, Michigan).

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

#### A graduate of Business Accounting Program at Sault College will reliably demonstrate the ability to:

- 1. record financial transactions in compliance with Canadian Generally Accepted Accounting Principles for sole proprietorships, partnerships, private enterprises, publicly accountable enterprises and non-profit organizations.
- 2. prepare and present financial statements, reports and other documents in compliance with Canadian Generally Accepted Accounting Principles for sole proprietorships, partnerships and private enterprises.
- 3. contribute to recurring decision-making by applying fundamental management accounting concepts.
- 4. prepare individuals income tax returns and basic tax planning in compliance with relevant legislation and regulations.
- 5. analyze organizational structures, the interdependence of functional areas, and the impact those relationships can have on financial performance.
- 6. analyze, within a Canadian context, the impact of economic variables, legislation, ethics, technological advances and the environment on an organizations operations.
- 7. outline the elements of an organizations internal control system and risk management.
- 8. contribute to recurring decision-making by applying fundamental financial management concepts.

## Reference

Ministry of Training, Colleges and Universities, Business Accounting Program Standards (MTCU 50100, September 2009)

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C and Grade 11 Foundations for College Math (C) MBF3C or mature student status.

# **CAREER PATHS**

Graduates of the Accounting program will be equipped for the role in operational management accounting.

The graduate will be in the position to pursue further qualifications in the Accounting and Business environment.

We have working agreements with several of the professional business and accounting organizations which allow students to transfer their diplomas towards credits in the professonal certification.

Another opportunity is to continue their academics through university to gain a degree in business. This will allow them to pursue a professional accounting designation.

Recent graduates employed in:• Lottery and Gaming Corporation• Chartered Accounting firms• Canada Custom Revenue Agency• Banking• Government Agencies• Small and Medium Business

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **EDUCATIONAL PATHS**

Graduates of the Business, Business Management or Business – Accounting programs may seek to pursue further study at local universities including Algoma University and Lake Superior State University (Sault Ste. Marie, Michigan) to obtain a Bachelor's Degree in Business or Accounting. Please contact Algoma University or Lake Superior State University for more information on transfer and entrance requirements for each post-secondary institution. For opportunities for further study at other Canadian post-secondary institutions, please contact the College or University of your choice.

# **OTHER INFORMATION**

For more information contact Program Coordinator John Cavaliere at 705.759.2554 ext 2764 or email john.cavaliere@saultcollege.ca

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

BCA101-4 Introduction to Financial Accounting BCG101-3 Introduction to Business Concepts BCH101-3 Introduction to Human Resources BCM101-3 Introduction to Marketing BCO101-4 Business Math BCO118-3 Computer Applications for Business I CMM115-3 Communications I

## **SEMESTER 2**

BCA102-4 Financial Accounting 2 BCM102-3 Marketing 2 BCO105-4 Business Math 2 BCO106-3 Microeconomics BCO119-3 Computer Applications for Business II CMM215-3 Business Communication GEN100-3 Global Citizenship

#### **SEMESTER 3**

BCA204-4 Management Accounting I BCA205-5 Intermediate Accounting I BCH102-3 Organizational Behaviour BCO207-3 Macroeconomics BCO208-4 Statistics BUS228-3 Small Business Management

#### **SEMESTER 4**

BCA206-4 Tax 1 Personal BCA207-5 Intermediate Accounting II BCA208-3 Accounting Information Systems BCG202-4 Finance I BCG204-3 Business Law

#### Select one of the following:

#### GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **Course Descriptions**

#### Semester 1

#### Introduction to Financial Accounting (BCA101) (4 credits)

In this course, students will be introduced to the accounting cycle and the preparation of financial statements. Topics include recording entries, preparing financial statements and accounting for merchandising activities. This course will be essential for further study in financial accounting.

Introduction to Business Concepts (BCG101) (3 credits)

In this course, students will be introduced to business in Canada, focusing on introductory topics for those interested in employment in a business management role. Topics of study will include the relationships between the areas of finance, human resources, marketing, and operations within an organization, business ethics and social responsibility, management concepts and practices, and an exploration of the entrepreneurial spirit.

## Introduction to Human Resources (BCH101) (3 credits)

In this course, students will learn how proper recruitment/selection strategies, and training and development methods, maintain an organization's competitive advantage. The integral role of job design and analysis in affecting compensation management and performance appraisal decisions will be examined. Students will investigate a variety of employment and health and safety laws as they relate to managing a diverse workforce. In addition, the fundamental principles of the union-management framework will be explored.

## Introduction to Marketing (BCM101) (3 credits)

This course is an informative introduction into marketing. Students will become acquainted with current Canadian marketing concepts, terminology and practices, examine strategies to apply them to contemporary marketing situations, and gain an understanding of how they affect an organizations profitability. Students will also explore consumer and business marketing, product planning, building customer relationships and creating customer value. This course provides a basic understanding of Canadian marketing structures and techniques including defining and segmenting target markets and interpreting market research data.

## Business Math (BCO101) (4 credits)

In this course, students will begin with a review of basic arithmetic and algebraic manipulations, continuing with the following topics: ratios and proportions, percentages and the percentage formula, discounts, mark-ups and mark-downs, payroll scenarios, break-even analysis, and simple interest.

# Computer Applications for Business I (BCO118) (3 credits)

In this course, students will have exposure to a comprehensive Windows-based financial spreadsheet package to enhance their problem solving abilities. The package used will be Microsoft Excel 2010 for Windows. The student will use this as a tool to prepare various reports and presentations, and applications which can be transferred in work commonly performed in the modern office. Students will gain hands-on experience in learning and understanding the software, as well as creating and developing spreadsheet applications. Students will develop and enhance spreadsheets, charts, data lists, tables, macros and perform what-if analysis.

## Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Semester 2

## Financial Accounting 2 (BCA102) (4 credits)

In this course, students will examine, in more depth, selected assets and liabilities found on the balance sheet as well as learn to account for equity transactions involving partnerships and corporations. Assets

examined include cash, accounts receivable, notes receivable, investments, plant, property, and equipment and intangibles. Liabilities studied will include short and long term bonds, notes payable, warranty liabilities and income tax liabilities.

## Marketing 2 (BCM102) (3 credits)

This course builds on the foundation of BCM101 Introduction to Marketing. Students will continue to examine current Canadian material on marketing and determine strategies for developing new products and services that are consistent with evolving marketing needs and principles of sustainability. Students will apply their knowledge in producing a marketing plan where they will set marketing objectives, develop a marketing mix, along with developing marketing strategies. Budgetary considerations will be taken into account, and evaluation criteria identified. Students will also contribute to the development of pricing strategies and participate in conducting market research to provide information needed to make marketing decisions. The development of analytical marketing skills will be emphasized through the use of problems and case studies.

## Business Math 2 (BCO105) (4 credits)

In this course, students will develop their skills and understanding of business mathematics involving interest calculations, compound interest, annuities, loan financing, bonds and investment decision making.

## Microeconomics (BCO106) (3 credits)

In this course, students will discuss small-scale economic phenomena. Students will examine the behaviours of individuals, households, firms, industries, and resource owners. Further, they will review the explanations for such things as prices and output of firms, and the choices of consumers in buying goods and services. Finally, they will examine technological change, costs, competitions and adjustments of markets to new conditions.

## Computer Applications for Business II (BCO119) (3 credits)

This course introduces students to Computerized Financial Management applications used by managers, supervisors and employees in the daily operational decision-making process. Students will gain practical hands-on experience recording business transactions in the General Ledger, Receivables, Payables, Payroll, Inventory and Banking modules. Students will also calculate and account for sales taxes.

## Business Communication (CMM215) (3 credits)

This course provides employment-related theory and practice in those written and oral reporting skills typical of a modern business or institution. The principles of writing are taught through the writing process.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 3

## Management Accounting I (BCA204) (4 credits)

In this course, students will be introduced to management accounting, a form of accounting used by managers to plan, control, and make decisions regarding operations.? Topics include; Analysis of different types of costs, cost behaviour, cost-volume-profit analysis, job-order costing, activity based costing, variable an0d absorption costing, budgeting, variance analysis, and relevant costs in decision making for Add/drop, Make/buy, and joint product cost decisions.

## Intermediate Accounting I (BCA205) (5 credits)

In this course, students will acquire a comprehensive overview of topics and concepts in financial accounting at an intermediate level of complexity. They will learn about the accounting standards and conceptual framework for private and publicly accountable enterprises by completing, identifying and applying the proper presentation and disclosure requirements for all financial statements under ASPE and IFRS. Students will focus on the asset section of the balance sheet and examine such topics as cash and receivables, inventory, investments, property, plant and equipment, intangible assets and goodwill.

## Organizational Behaviour (BCH102) (3 credits)

In this course, students will assess the impacts of human behaviour on organizational performance through the study of personal values and perceptions, motivational techniques, effective utilization of teamwork, conflict resolution options, negotiation processes, leadership styles, approaches to decision-making, options for organizational structure, and change management. Students will learn to predict potential impacts of human resources policies and practices on employee behaviour as well as recommend management practices to effectively address specific employee behaviours.

## Macroeconomics (BCO207) (3 credits)

In this course, students will discuss large-scale economic phenomena. Students will examine the behaviours of individual nations in a global economics context. Further, they will review the explanations for such things as prices and output in aggregate for an entire economy. Finally, they will examine technological change, global trade and the effect of tariffs.

## Statistics (BCO208) (4 credits)

In this course, students will develop the necessary mathematical skills for conducting descriptive and inferential statistical analyses with business applications. Topics will include data description and presentation, probability, probability distributions, sampling distributions, estimation, hypothesis testing, regression and correlation.

## Small Business Management (BUS228) (3 credits)

This course introduces the student to the study of contemporary management skills required to manage small businesses. Students will examine the role of management, identify effective management, and explore techniques aimed at improving management skills in an ever-changing business environment.

## Semester 4

# Tax 1 Personal (BCA206) (4 credits)

In this course, students will acquire a basic working knowledge of the Canadian Income Tax System. The students will become familiar with theoretical concepts and technical rules in the Income Tax Act, specifically those applicable to individual taxpayers, and learn to apply them to the determination of net and taxable income and to the calculation of income taxes payable. Students will use the knowledge acquired to prepare a personal income tax return using tax software.

## Intermediate Accounting II (BCA207) (5 credits)

In this course, students will be introduced to the concepts and procedures required to account for shareholders` equity, earnings per share, leases and pensions. An intermediate level examination of current and long term liabilities, complex financial instruments, income taxes, accounting changes, and other measurement and disclosure issues will be examined. The students will be required to identify and apply the proper disclosure requirements for all required financial statements under ASPE (Accounting Standards for Private Enterprises) and under IFRS (International Financial Reporting Standards).

# Accounting Information Systems (BCA208) (3 credits)

This course introduces the student to the use of computer-based information systems in management. Topics surveyed include hardware and software of computer systems, file and database organization, networks and telecommunications, the systems development process, designing information systems solutions, systems security and controls, and the management of information systems. Computer software is used to provide illustration and practice in database concepts.

The course content may be presented through a blend of instructional methods, including lecture, Internet, discussion, independent study, audio/video conferencing and videotape.

## Finance I (BCG202) (4 credits)

In this course, students will examine the goals and objectives of financial management with an emphasis on decision making. Students will evaluate data to prepare estimates, apply working capital management techniques, evaluate sources of short-term financing, calculate value and rate of return, and calculate the cost of capital.

## Business Law (BCG204) (3 credits)

This course presents a practical study of Canadian business law, including the legal and administrative systems, torts, contracts, employment laws, and general legal considerations that arise for a business. In addition, students will assess intellectual property, patent, trademark, copyright, and franchising laws and apply them to business cases.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Business for Trades

#### Certificate (2005)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This part-time online certificate is designed for tradespersons who would like to develop the skills needed to manage a trades business. Learners will develop a variety of relevant business-related knowledge and skills including operations, planning, finance, marketing, human resources, health and safety, and ethics. Graduates will be well-positioned to manage a small to medium-sized trades-related business, to start their own trades-related business, or to use their newly developed skills and knowledge to improve their existing business.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

#### **Entrance and Certificate Requirements**

- Students must have an Ontario Secondary School Diploma (OSSD), or equivalent, and be 19 years of age or older.
- Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate.
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

# **CAREER PATHS**

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: http://www.jobbank.gc.ca.

## **CERTIFICATIONS**

Upon successful completion of the online Business for trades certificate program, students will obtain a Sault College certificate.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1292-3 Building and Maintaining Customer Relationships OEL1293-3 Financial Processes in the Trades OEL1294-3 Occupational Health and Safety OEL1295-3 Marketing a Trades Business OEL1296-3 Operating a Trades Business OEL1296-3 Human Relations

## **Course Descriptions**

### Semester 1

## Building and Maintaining Customer Relationships (OEL1292) (3 credits)

Students develop an understanding of customer service and the skills associated with understanding the needs of customers, meeting those needs and fostering an environment that encourages customers to return.

## Financial Processes in the Trades (OEL1293) (3 credits)

This finance course is unique in that it provides a financial toolkit specifically designed with the entrepreneurial Journeyperson in mind. It is rich with common business taxation dilemmas faced by those operating their own businesses or for those serving in a managerial role. Although the focus is on practicalityof use, the goal is for the Journeyperson to acknowledge and embrace the usefulness of the learning. Comprehending the logic behind appropriate project pricing and time to completion charting can be the difference between profit and loss. This course also introduces the simplicities of an IPO and the complexities of the risk and return correlation.

## Occupational Health and Safety (OEL1294) (3 credits)

This course introduces participants to the broad and ever-changing field of occupational health and safety, an inherently technical subject area. The multiple dimensions of the various issues--technical, legislative, political, and personal--are a required part of the training for a professional in this field or for someone who is involved with this kind of operation. Major topic areas include the Occupational Health and Safety Act, WCB, WHMIS, transportation of dangerous goods, accident prevention and investigation, physical and biological agents, and the management of Occupational Health and Safety programs

## Marketing a Trades Business (OEL1295) (3 credits)

Business owners in trades, such as plumbing, automotive service, heating and cooling repair, electrical contracting and carpentry have a difficult task in marketing their business. This course provides a brief overview of selected marketing theory before engaging participants directly in practical exercises on how to improve a trades business though proven marketing strategies. Participants will understand how service marketing in a trades business differs from traditional product marketing, and the enormous impact that the individual?s personal brand has on the company. Through a self-analysis exercise and a competitive analysis, participants will determine where they fit in the market. The importance of networking and referrals will be emphasized. Participants will also consider various messaging and media options that resonate best with trades customers. Finally, participants will consider their specific trade to create a streamlined plan of action to promote their services.

## Operating a Trades Business (OEL1296) (3 credits)

The student will be introduced to general considerations, and unique facets in the operation of a trades business. Using a business simulation scenario, students will go through all the stages of operating and maintaining a trades based business. Topics to be covered include planning, research, legal considerations, and day to day operation. Issues related directly to trades businesses will be the focus throughout the course.

#### Human Relations (OEL851) (2 credits)

What makes people tick and how to keep them going! Human Relations will improve your understanding of people. You will discuss motivation, handling conflict, delegation, building morale and more. Studying these topics will give you practical insights into handling people more effectively and improve your overall performance.

# **Business Fundamentals**

**Ontario College Certificate (1 year - 2 semesters ) (2037)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

In 8-months obtain a Business Fundamentals Certificate to enter the workforce faster or to discover your unique interest in Business by exploring the possible pathways and subject areas that lead into a 2 and/or 3 year Business program.

Join our well-respected Professors as you explore human resources, accounting, marketing and business principles and concepts toward a greater understanding of the world of business. Students will have access to curriculum that integrates the use of current technologies and innovative software in a look into the real world of business to give you an edge to succeed.

Sault College's unique geographic location, bordering the United States, allows us the opportunity to provide a global perspective to the important study of business. You can rest assured that the Business Fundamentals program will provide you with a unique set of skills that are in increasing demand and highly regarded by the business community. At Sault College, preparing you for a successful career is Our Business.

#### **PROGRAM OUTCOMES**

The graduate has reliably demonstrated the ability to

- 1. Identify factors that have an impact on an organizations business opportunities.
- 2. Explain the impact of corporate sustainability\*, corporate social responsibility and ethics on an organizations business initiatives.
- 3. Use current technologies to support an organization's business initiatives.
- 4. Apply basic research skills to support business decision making.
- 5. Perform basic accounting procedures and financial calculations to support the operations of an organization.
- 6. Describe marketing and sales concepts used to support the operations of an organization.
- 7. Develop strategies for ongoing personal and professional development to enhance work performance.
- 8. Outline the functional areas of a business and their interrelationships.

# **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C and Grade 11 Foundations for College Math (C) MBF3C or mature student status.

# **CAREER PATHS**

Completion of the Business Fundamentals program may help you find a job in several entry-level positions

including sales, general administration and customer service. It also serves as a starting point to other Business program opportunities.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

### **EDUCATIONAL PATHS**

Graduates of the Business Fundamentals program may move into the second year of the Business or Business Accounting program at Sault College.

## **OTHER INFORMATION**

For more information contact Program Coordinator John Cavaliere at 705.759.2554 ext 2764 or email john.cavaliere@saultcollege.ca.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

BCA101-4 Introduction to Financial Accounting BCG101-3 Introduction to Business Concepts BCH101-3 Introduction to Human Resources BCM101-3 Introduction to Marketing BCO101-4 Business Math BCO118-3 Computer Applications for Business I CMM115-3 Communications I

#### **SEMESTER 2**

BCA209-4 Managerial Accounting BCM102-3 Marketing 2 BCO105-4 Business Math 2 BCO106-3 Microeconomics BCO119-3 Computer Applications for Business II CMM215-3 Business Communication GEN100-3 Global Citizenship

## **Course Descriptions**

#### Semester 1

Introduction to Financial Accounting (BCA101) (4 credits)

In this course, students will be introduced to the accounting cycle and the preparation of financial statements. Topics include recording entries, preparing financial statements and accounting for merchandising activities. This course will be essential for further study in financial accounting.

### Introduction to Business Concepts (BCG101) (3 credits)

In this course, students will be introduced to business in Canada, focusing on introductory topics for those interested in employment in a business management role. Topics of study will include the relationships between the areas of finance, human resources, marketing, and operations within an organization, business ethics and social responsibility, management concepts and practices, and an exploration of the entrepreneurial spirit.

### Introduction to Human Resources (BCH101) (3 credits)

In this course, students will learn how proper recruitment/selection strategies, and training and development methods, maintain an organization's competitive advantage. The integral role of job design and analysis in affecting compensation management and performance appraisal decisions will be examined. Students will investigate a variety of employment and health and safety laws as they relate to managing a diverse workforce. In addition, the fundamental principles of the union-management framework will be explored.

### Introduction to Marketing (BCM101) (3 credits)

This course is an informative introduction into marketing. Students will become acquainted with current Canadian marketing concepts, terminology and practices, examine strategies to apply them to contemporary marketing situations, and gain an understanding of how they affect an organizations profitability. Students will also explore consumer and business marketing, product planning, building customer relationships and creating customer value. This course provides a basic understanding of Canadian marketing structures and techniques including defining and segmenting target markets and interpreting market research data.

#### Business Math (BCO101) (4 credits)

In this course, students will begin with a review of basic arithmetic and algebraic manipulations, continuing with the following topics: ratios and proportions, percentages and the percentage formula, discounts, mark-ups and mark-downs, payroll scenarios, break-even analysis, and simple interest.

## Computer Applications for Business I (BCO118) (3 credits)

In this course, students will have exposure to a comprehensive Windows-based financial spreadsheet package to enhance their problem solving abilities. The package used will be Microsoft Excel 2010 for Windows. The student will use this as a tool to prepare various reports and presentations, and applications which can be transferred in work commonly performed in the modern office. Students will gain hands-on experience in learning and understanding the software, as well as creating and developing spreadsheet applications. Students will develop and enhance spreadsheets, charts, data lists, tables, macros and perform what-if analysis.

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning

to revising, while providing opportunities to explore various modes of communication.

#### Semester 2

#### Managerial Accounting (BCA209) (4 credits)

In this course, students will learn how to effectively use the accounting information that is required by managers to plan, direct, and control the operations of their business organization. Students will gain an understanding of managerial accounting data pertaining to cost systems, cost behaviour, cost-volume-profit relationships, decision-making, and budgeting.

#### Marketing 2 (BCM102) (3 credits)

This course builds on the foundation of BCM101 Introduction to Marketing. Students will continue to examine current Canadian material on marketing and determine strategies for developing new products and services that are consistent with evolving marketing needs and principles of sustainability. Students will apply their knowledge in producing a marketing plan where they will set marketing objectives, develop a marketing mix, along with developing marketing strategies. Budgetary considerations will be taken into account, and evaluation criteria identified. Students will also contribute to the development of pricing strategies and participate in conducting market research to provide information needed to make marketing decisions. The development of analytical marketing skills will be emphasized through the use of problems and case studies.

#### Business Math 2 (BCO105) (4 credits)

In this course, students will develop their skills and understanding of business mathematics involving interest calculations, compound interest, annuities, loan financing, bonds and investment decision making.

#### Microeconomics (BCO106) (3 credits)

In this course, students will discuss small-scale economic phenomena. Students will examine the behaviours of individuals, households, firms, industries, and resource owners. Further, they will review the explanations for such things as prices and output of firms, and the choices of consumers in buying goods and services. Finally, they will examine technological change, costs, competitions and adjustments of markets to new conditions.

#### Computer Applications for Business II (BCO119) (3 credits)

This course introduces students to Computerized Financial Management applications used by managers, supervisors and employees in the daily operational decision-making process. Students will gain practical hands-on experience recording business transactions in the General Ledger, Receivables, Payables, Payroll, Inventory and Banking modules. Students will also calculate and account for sales taxes.

#### Business Communication (CMM215) (3 credits)

This course provides employment-related theory and practice in those written and oral reporting skills typical of a modern business or institution. The principles of writing are taught through the writing process.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed.

Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## **Business Management**

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (2102)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This eight-month program, unique in the province of Ontario, is designed for those who don't have a business-related background or education, but recognize the importance of having key knowledge of business to enhance job prospects and for advancement in their careers. In only a few months, you will develop the skills in the key areas of management, marketing, accounting, finance, human resource management and other critical business-related functions, while earning a graduate certificate from a recognized post-secondary program. Most other college programs take two years to give you the level of study you will gain at Sault College in less than one. Business knowledge is recognized as a necessary piece of one's portfolio when actively seeking exciting opportunities in the domestic and global marketplace. In today's economy, employers seek what this program will provide you: the skills required to solve problems, make decisions, and perform a multitude of tasks, all with a strong foundation of what it takes to lead and succeed.

#### **PROGRAM OUTCOMES**

## A graduate of the Business Management Graduate Certificate Program at Sault College will reliably demonstrate the ability to:

- 1. Apply current concepts/systems and technologies to support an organization's business initiatives.
- 2. Describe the role of the human resource function and its impact on an organization.
- 3. Apply accounting and financial principles to support?the operations of an organization.
- 4. Differentiate and interpret marketing and sales concepts used to support the operations of an organization.
- 5. Compile and assess components of a business plan.
- 6. Practice work in compliance with relevant statutes, regulations and business practices.
- 7. Relate current concepts/systems to the planning, implementation and monitoring of business activities and strategic plans.
- 8. Distinguish the principles of corporate sustainability, corporate social responsibility and ethics to support an organization's business initiative.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, University Degree or equivalent in a non-business program.

## **CAREER PATHS**

Increasingly, graduates are looking to use their newly developed business skills to find or create employment as small business owners/operators, business managers, franchise operators, business consultants and account representatives.

### **EDUCATIONAL PATHS**

Graduates of the Business, Business Management or Business – Accounting programs may seek to pursue further study at local universities including Algoma University and Lake Superior State University (Sault Ste. Marie, Michigan) to obtain a Bachelor's Degree in Business or Accounting. Visit Algoma University or Lake Superior State University for more information on transfer and entrance requirements for each post-secondary institution. For opportunities for further study at other Canadian post-secondary institutions, please contact the College or University of your choice.

### **OTHER INFORMATION**

For more information contact Program Coordinator John Cavaliere at 705.759.2554 ext 2764 or email john.cavaliere@saultcollege.ca

### **PROGRAM OF STUDY**

#### **SEMESTER 1**

ACC209-4 Managerial Accounting BCA101-4 Introduction to Financial Accounting BCH101-3 Introduction to Human Resources BCM101-3 Introduction to Marketing BCO118-3 Computer Applications for Business I BUS228-3 Small Business Management

#### **SEMESTER 2**

BCG203-3 Entrepreneurship BCG204-3 Business Law BCG206-3 Corporate Social Responsibility BCG307-3 Project Management BCO106-3 Microeconomics BCO119-3 Computer Applications for Business II

## **Course Descriptions**

Semester 1

### Managerial Accounting (ACC209) (4 credits)

In this course, students will learn how to effectively use the accounting information that is required by managers to plan, direct, and control the operations of their business organization. Students will gain an understanding of managerial accounting data pertaining to cost systems, cost behaviour, cost-volume-profit relationships, decision-making, and budgeting.

Introduction to Financial Accounting (BCA101) (4 credits)

In this course, students will be introduced to the accounting cycle and the preparation of financial statements. Topics include recording entries, preparing financial statements and accounting for merchandising activities. This course will be essential for further study in financial accounting.

### Introduction to Human Resources (BCH101) (3 credits)

In this course, students will learn how proper recruitment/selection strategies, and training and development methods, maintain an organization's competitive advantage. The integral role of job design and analysis in affecting compensation management and performance appraisal decisions will be examined. Students will investigate a variety of employment and health and safety laws as they relate to managing a diverse workforce. In addition, the fundamental principles of the union-management framework will be explored.

## Introduction to Marketing (BCM101) (3 credits)

This course is an informative introduction into marketing. Students will become acquainted with current Canadian marketing concepts, terminology and practices, examine strategies to apply them to contemporary marketing situations, and gain an understanding of how they affect an organizations profitability. Students will also explore consumer and business marketing, product planning, building customer relationships and creating customer value. This course provides a basic understanding of Canadian marketing structures and techniques including defining and segmenting target markets and interpreting market research data.

## Computer Applications for Business I (BCO118) (3 credits)

In this course, students will have exposure to a comprehensive Windows-based financial spreadsheet package to enhance their problem solving abilities. The package used will be Microsoft Excel 2010 for Windows. The student will use this as a tool to prepare various reports and presentations, and applications which can be transferred in work commonly performed in the modern office. Students will gain hands-on experience in learning and understanding the software, as well as creating and developing spreadsheet applications. Students will develop and enhance spreadsheets, charts, data lists, tables, macros and perform what-if analysis.

#### Small Business Management (BUS228) (3 credits)

This course introduces the student to the study of contemporary management skills required to manage small businesses. Students will examine the role of management, identify effective management, and explore techniques aimed at improving management skills in an ever-changing business environment.

#### Semester 2

#### Entrepreneurship (BCG203) (3 credits)

This course introduces students to the nature of business and entrepreneurship. Students will obtain an overview of entrepreneurship and the entrepreneurial process then expand into key concepts including business types, customers, marketing, financials and human resources. The options of franchising and purchasing existing businesses are also covered in this course. Students will outline and assess the components of a Business Plan.

#### Business Law (BCG204) (3 credits)

This course presents a practical study of Canadian business law, including the legal and administrative systems, torts, contracts, employment laws, and general legal considerations that arise for a business. In addition, students will assess intellectual property, patent, trademark, copyright, and franchising laws and apply them to business cases.

#### Corporate Social Responsibility (BCG206) (3 credits)

In this course, students will study the impact which corporations have on the environment, employees, communities, and stakeholders and will examine related ethical issues and concerns in these areas. Students will define good corporate citizenship and will look at government and private legislation/regulations which aim to make corporations socially accountable. Various approaches to Corporate Social Responsibility (CSR) and CSR policies will be reviewed and assessed.

#### Project Management (BCG307) (3 credits)

In this course, students will assess the impacts of human behaviour on organizational performance through the study of personal values and perceptions, motivational techniques, effective utilization of teamwork, conflict resolution options, negotiation processes, leadership styles, approaches to decision-making, options for organizational structure, and change management. Students will learn to predict potential impacts of human resources policies and practices on employee behaviour as well as recommend management practices to effectively address specific employee behaviours.

### Microeconomics (BCO106) (3 credits)

In this course, students will discuss small-scale economic phenomena. Students will examine the behaviours of individuals, households, firms, industries, and resource owners. Further, they will review the explanations for such things as prices and output of firms, and the choices of consumers in buying goods and services. Finally, they will examine technological change, costs, competitions and adjustments of markets to new conditions.

#### Computer Applications for Business II (BCO119) (3 credits)

This course introduces students to Computerized Financial Management applications used by managers, supervisors and employees in the daily operational decision-making process. Students will gain practical hands-on experience recording business transactions in the General Ledger, Receivables, Payables, Payroll, Inventory and Banking modules. Students will also calculate and account for sales taxes.

## Global Business Management

**Ontario College Graduate Certificate (2 Years - 4 Semesters ) (2106)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Global Business Management program focuses on the impact international business has on the operation and strategic decisions of Canadian firms. Students will be introduced to and analyze the opportunities and challenges of globalization, international competition and regional integration. Graduates will be equipped to critically think about the increasingly connected world through studies of the global environment, theory of international trade and investment, currency markets and modes of entry, as well as emerging issues of gated globalization, changing world order and corporate social responsibility.

#### **PROGRAM OUTCOMES**

A graduate of the Global Business Management program at Sault College will reliably demonstrate the ability to:

- 1. Collect, process and interpret data used to support international business.
- 2. Develop, execute and analyze the results of a comprehensive global business plan.
- 3. Conduct business with diverse populations using culturally appropriate methods in compliance with relevant laws and regulations.
- 4. Assist in the importing and exporting functions of a business.
- 5. Plan, direct, execute and evaluate individual and team projects.
- 6. Implement strategies utilizing domestic and foreign government programs, policies, and agencies which facilitate international trade.
- 7. Apply financial knowledge and skill to the operation of an international business.
- 8. Apply leadership and teamwork skills establishing and maintaining working relationships.
- 9. Apply quality control and assurance programs to sourcing and supplying.
- 10. Apply the principles of business ethics and international corporate responsibility.
- 11. Develop new products and services consistent with evolving market needs.
- 12. Evaluate the viability of marketing a product or service in an international market or markets.
- 13. Develop personal professional development strategies and plans to enhance leadership and management skills.
- 14. Apply entrepreneurial strategies to maximize the effectiveness of international business initiatives.
- 15. Employ environmentally sustainable practices within the profession.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, Degree, or equivalent.

Applicants whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.

## MANDATORY FEES

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
N/A	N/A	\$15,899.40	\$2,057.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

### **OTHER INFORMATION**

This program is available to only International students at this time.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

ACC209-4 Managerial Accounting CMM510-2 Professional Communication GBM101-3 Business Analytics and Data Strategy GBM102-3 Project Capture Planning GBM103-3 Principles of Sustainability and Social Responsibility GBM104-3 Professional Development GBM105-3 Global Value Chain

#### **SEMESTER 2**

BCG207-4 Business Simulation GBM201-3 Leadership and Emotional Intelligence GBM202-4 International Trade Finance GBM203-3 Project Leadership GBM204-3 International Business Law GBM205-3 Products and Services for Global Markets

#### **SEMESTER 3**

GBM301-3 Feasibility of International Trade GBM302-4 Advanced International Finance GBM303-3 Principles of Buying GBM304-3 International Market Entry Strategies GBM305-3 Negotiation, Conflict, and Risk Management GBM306-3 International Sales and Marketing GBM307-3 Strategic Business Management

#### **SEMESTER 4**

GBM401-3 Design Thinking and Innovation GBM402-3 Information Systems GBM403-3 Project Risk Management GBM404-10 Applied Project

## **Course Descriptions**

#### Semester 1

Managerial Accounting (ACC209) (4 credits)

In this course, students will learn how to effectively use the accounting information that is required by managers to plan, direct, and control the operations of their business organization. Students will gain an understanding of managerial accounting data pertaining to cost systems, cost behaviour, cost-volume-profit relationships, decision-making, and budgeting.

### Professional Communication (CMM510) (2 credits)

This course helps students develop professional communication skills required for success in the Hospitality and Tourism industry. Assignments involve various modes of communication, including writing, with a focus on program-related materials and expectations. With opportunities to use computers and other media, students create effective job search documents, develop interview skills, and identify career pathway possibilities. Emphasis is placed on integrating positive and inclusive language, listening to client needs, and developing error-free, effective communications.

### Business Analytics and Data Strategy (GBM101) (3 credits)

This course introduces data driven business decision making skills that better inform practices in the workplace. Through the use of statistical tools, students will prepare and interpret visual representations of data.

## Project Capture Planning (GBM102) (3 credits)

In this course, students will demonstrate the principles and processes of creating an expanded project capture plan (based on the ISO Charter) to be used by companies and organizations to generate new business or solve complicated integrated tasks. The objective is to make students understand how this type of plan is used in the international business environment and to create realistic plans in preparation for life after College.

## Principles of Sustainability and Social Responsibility (GBM103) (3 credits)

In this course, students will study the impact which corporations have on the environment, employees, communities, and stakeholders and will examine related ethical issues and concerns in these areas. Students will define good corporate citizenship and will look at government and private legislation/regulations which aim to make corporations socially accountable. Various approaches to Corporate Social Responsibility (CSR) and CSR policies will be reviewed and assessed.

#### Professional Development (GBM104) (3 credits)

This course familiarizes students with the program and area of study. It further gives students the opportunity to work through a topic-specific and relevant case study toward a successful pathway for success.

#### Global Value Chain (GBM105) (3 credits)

The Global Value Chain course examines how you can control and manage logistical systems within the global value chain in order to minimize your costs and risks, and maximize your international business potential. It also examines aspects of distribution, inventory management, document management and procurement, which are integral to international trade logistics.

Students learn how to procure goods and services and in international markets efficiently and effectively, keep your customers, clients and suppliers happy by transporting goods in a timely manner and in compliance with all regulatory requirements, minimize your risk and keep your goods safe by taking all measures needed to prepare them for transport, meet every need of your international suppliers, buyers and customers by implementing new inventory management strategies, and spend less time waiting at customs by preparing and managing all necessary documentation for exporting and importing goods and services.

#### Semester 2

#### Business Simulation (BCG207) (4 credits)

Students will utilize the knowledge relating to business activities gained through the curriculum. Students will apply their business knowledge in a simulated business environment to test their ability as a business owner/manager.

#### Leadership and Emotional Intelligence (GBM201) (3 credits)

This course looks at how emotional intelligence improves leadership and relationship management skills. Students will identify their leadership styles through self-assessment and will use emotional intelligence skills to encourage innovation, accountability and potential in leadership roles.

#### International Trade Finance (GBM202) (4 credits)

This course offers students the skills necessary to manage cash flow and mitigate financial risk by selecting appropriate transaction methods and tools for international trade activities, keep business on a strong financial foundation by selecting the best options for negotiation terms and non-payment dispute resolution, as well as how to negotiate the best payment options and arrangements based on risk assessment and trade research findings and minimize an organization's exposure to financial risk using tools such as credit insurance, guarantees and bonds.

Keep the cash flowing by implementing financial management strategies to address any factors that could impact company bottom line, learn how to keep buyers and customers happy by resolving non-payment situations through the use of contracts in a conflict-free manner and strategically manage business assets by developing a smart financial plan for short, medium and long-term growth.

#### Project Leadership (GBM203) (3 credits)

This course is designed to help participants develop competencies by way of knowledge, skills and attitudes needed to perform effectively as members of project teams, as project managers or as functional managers who use projects as building blocks in the design and execution of organizational strategies. The emphasis is placed on how leadership and change management application can demonstrate how projects can be used to develop and execute strategic initiatives in preparing the organization for its uncertain future. The course emphasizes an integral view of projects involving cross-functional? and cross organizational teams as highly versatile strategic resources and key elements for strategic planning, organizing, motivating, directing and controlling projects. Topic areas include Leadership Models, Accountability, Leadership Assessment, Human Relations, Change Management, Social Responsibilities.

#### International Business Law (GBM204) (3 credits)

This course introduces students to the basic tenets of the legal system in the world market. Against the backdrop of a case intensive approach, the course commences with the foundational elements of public international law by examining sources of law, comparative law, and state responsibility. From this basis the course continues with an examination of private international law and the legal effects on individuals and business organizations.

#### Products and Services for Global Markets (GBM205) (3 credits)

In the Products and Services for a Global Market course, you'll learn how to adapt and conform your products and services to differences in regulatory, legal, cultural and consumer/client requirements in international markets. Analyzing how these differences may impact the cost, product design, packaging, labeling, product testing, and service delivery, and then developing strategies around these custom aspects is key to your long-term success in any international target market. Students learn how to establish a competitive advantage with the best design options for adapting products and an effective plan to implement good development and testing processes, maximize output and minimize costs and risks by developing products for the international market based on customer specifications and regulations, build a strong local reputation by meeting customers' cultural needs and abiding by all legal and regulatory requirements, stand out from the crowd by developing well-defined and/or customized service offerings, and keep your customers happy by addressing the specific needs of your target markets.

#### Semester 3

#### Feasibility of International Trade (GBM301) (3 credits)

This course gives students the confidence to delve into international opportunities while ensuring the success of new international ventures by knowing and following the critical steps. Improve your bottom line by properly analyzing your organizational readiness and correctly identifying promising opportunities. Students will learn how to decide whether new international opportunities are viable by conducting thorough research and analysis, make smarter decisions by assessing your organizational readiness for new international trade initiatives, find the best potential import and/or export ventures for your business with effective market research, ensure your company remains profitable by conducting cost-benefit analyses for importing or exporting potential products and services, and mitigate possible risks by developing and implementing strategies and activities to monitor and manage them.

#### Advanced International Finance (GBM302) (4 credits)

This course will further expand on relevant topics in international finance. By familiarizing analytical techniques needed to evaluate empirical performance models, students will learn more about financial liberalization and banking system stability.

#### Principles of Buying (GBM303) (3 credits)

This course provides a critical view into the purchasing elements of world of Supply Chain Management. Topical focus will relate to supply organizations, quality, supplier relations, sourcing, price and cost management and the role of transportation. The scope of this course will include the private and public business sectors.

#### International Market Entry Strategies (GBM304) (3 credits)

The International Market Entry Strategies course examines what individuals in organizations need to know and do to ensure the success of new international ventures. Students will learn how to research market entry options, analyze them, and then select the most effective strategy for your needs. With this knowledge in hand, this explains how to implement and manage new market entry strategy and build a successful future in new market. Students learn how to choose the most advantageous market entry strategy based on research and analysis of options and potential issues, develop an international business plan that details key business strategies with metrics to monitor success, excel in new markets by establishing and managing strategic alliances through use of research, evaluation, negotiation and continued communication, establish and maintain productive business relationships using knowledge of target market`s culture, and maximize profit and ensure efficient distribution and control by managing direct and indirect exports.

#### Negotiation, Conflict, and Risk Management (GBM305) (3 credits)

This course introduces the major schools of thought in social psychology, law, and business. Conflict resolution strategies are examined from theoretical and practical perspectives to develop a deeper self-awareness.

#### International Sales and Marketing (GBM306) (3 credits)

This course equips students with the knowledge and skills necessary to build their company's strong international brand, develop effective sales and marketing strategies, build a high demand for product and create strong relationships with customers. You'll be able to do all of the above by recognizing and applying the considerations an organization must make when promoting and selling products or services beyond domestic borders. In this course students learn how to fulfill your market entry and competitive strategies with the creation of actionable marketing and sales plans, meet the needs of your customers by adapting products and services for specific international markets, appeal to the values and preferences of the target market by developing a strong international brand, encourage future sales by providing efficient delivery of purchases and customer support, increase your reach, decrease costs and enhance the customer experience by developing an easy-to-use e-commerce operation.

#### Strategic Business Management (GBM307) (3 credits)

Students will examine the principles and processes of creating strategy to be reflected in a strategic plan. Case studies will be used to promote an understanding of problems, issues and opportunities being faced by companies striving to remain competitive. Students will develop the capability to develop integrated and realistic plans in preparation for their entry into the commercial business environment.

#### Semester 4

#### Design Thinking and Innovation (GBM401) (3 credits)

The gig economy is altering the way that people view and perform work, and businesses must be ready to respond with innovative policies and programs. This course will provide tools to think more creatively in this changing business landscape. By reviewing cases, students will develop compelling solutions to nurture superior innovation practices.

### Information Systems (GBM402) (3 credits)

Technology has changed the way we gather, disseminate and interpret data in business. Hence, management demands have increased the need for automated human resources and supply chain management systems. This course will allow participants to gain an understanding of the requirements of an effective information systems, its design and effective business decision making.

### Project Risk Management (GBM403) (3 credits)

In this course, the processes and activities necessary to manage risk throughout a project life cycle will be identified and applied. Students will be exposed to practical exercises, tools and techniques for both qualitative and quantitative analysis for handling project risks. There will be an introduction to a comprehensive project risk management process/matrix that extends from initiation through to project completion and from risk symptoms to risk event impact. Critical to risk management success is the business ability to project risk alignment and mitigation strategies beyond the basic financial contingency approach.

## Applied Project (GBM404) (10 credits)

Students will undertake a semester-long, project-based learning opportunity in the development and execution of an applied project. The objective of the collaborative applied project is to have students, as team members apply and integrate the skill sets and knowledge that form the core of their training in this program. Students will augment their academic training with valuable case study and experiential learning.

# Health Care Administration

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (2186)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This Ontario College Graduate Certificate has been designed for those who currently have a degree or diploma and wish to continue their education in Health Care Administration. It is preferable if the previous education is in health care and the person has experience working in the health care field. Graduates of this program will have gained administrative and leadership skills, preparing them for management careers in a variety of health care facilities.

#### **PROGRAM OUTCOMES**

The graduate has reliably demonstrated the ability to:

- 1. Communicate effectively and appropriately with patients, families, and members both the health care and administrative teams to maintain a wholly interactive environment.
- 2. Support evidence informed decision making, using critical thinking skills and best practices in the administration of a healthcare facility.
- 3. Practice within the legal, ethical and professional scope of practice of a manager in the province of Ontario.
- 4. Address the needs of a diverse patient population using best practices to ensure progressive and positive processes within a health care facility.
- 5. Utilize progressive, professional leadership concepts while working within an interprofessional health care team.
- 6. Apply accounting and financial principles to support the management and operations of an organization.
- 7. Utilize health care technology and informatics for the benefit of the patients and support of the institution.
- 8. Outline strategies to manage risks in the business activities of a health care organization.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma or Degree or equivalent, preferably in a health care field.

Applicants, whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.

## **CAREER PATHS**

Graduates will be prepared for management positions in health care facilities such as hospitals, clinics, long term care homes and private businesses.

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## **MANDATORY FEES**

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Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,025.80	\$1,117.00	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

For more information contact Program Coordinator Rebecca Keown at 705-759-2554 ext. 2849 or via email at <u>rebecca.keown@saultcollege.ca</u>.

## PROGRAM OF STUDY

### **SEMESTER 1**

HCA111-3 Communications for Healthcare Professionals HCA112-3 Health Infomatics HCA113-3 Policy in Health Care HCA114-3 Leadership in Health Care Administration HCA115-3 Ethics in Health Care Administration HCA116-3 Financial Processes for Health Care Facilities

### **SEMESTER 2**

HCA117-3 Managing in a Health Care Setting HCA118-3 Innovation in Health Care HCA119-3 Legal Aspects of Health Care Administration HCA125-3 Critical Thinking & Evidence Informed Practices HCA126-3 Health Care Operations HCA127-3 Capstone Project

## **Course Descriptions**

#### Semester 1

#### Communications for Healthcare Professionals (HCA111) (3 credits)

This course provides students with the resources and skills to communicate in an effective, professional manner in a health care setting, both internally and externally to the organization. Students will apply best practices in communication in both oral and written formats. Students are expected to use a variety of resources, technologies, and social media to interact with stakeholders

#### Health Infomatics (HCA112) (3 credits)

This course is intended to provide student with computer literacy relevant to health care sector managers. Important skills would include: word processing, use of spreadsheets, importing data, presentations and researching. There is also a focus on secure information systems, such as electronic health records. Students will learn about confidentiality, security and privacy standards to be maintained, eg. Personal Health Information Protection Act. Students will learn about trends, new electronic information systems and software programs.

#### Policy in Health Care (HCA113) (3 credits)

In this course, students will study the Canadian Health Care System from the perspectives of history, the law, the economy, politics, ethics and the national social background. Students will gain an understanding of current issues and what drives evolution of the health care system. Students will study policy development, importance to the system and current trends. Impacts on the health care system, in terms of access, utilization and outcomes will be studied.

### Leadership in Health Care Administration (HCA114) (3 credits)

This course provides an introduction to frameworks and practices of effective health care leadership.

Students will learn how to apply strategies and attitudes to lead themselves, inspire and engage others, and build productive teams, coalitions and partnerships to achieve organizational and health system goals. Students will explore strategies to lead up, across and down. They will apply tools such as project chartering and management, strategic planning, cascading scorecards, team huddles, and regular status updates to achieve and sustain results.

## Ethics in Health Care Administration (HCA115) (3 credits)

Students will study ethical standards and how to apply ethical decision frameworks in the decision making process. Patient safety will be highlighted to support the development of attitudes of accountability and caring within the organization. Studies will focus on decision making based on different ethical theories while considering the patient/family perspectives. Important concepts will be considered within the context of the client/patient/family, eg. Religion, spirituality, beliefs and culture.

### Financial Processes for Health Care Facilities (HCA116) (3 credits)

This course provides students with basic accounting and budgeting principles. They will learn about a variety of financial resources and practices they can use for decision making about financial aspects of management in a health care environment. Students will learn about different funding models and how to operationalize the current budget of a unit/division within a larger institution. They will learn to analyze and convey important financial reports, becoming familiar. They will be subjected to performance evaluation, scorecards that measure a variety of outcomes. Students will be introduced to the funding and financial environments of Ontario health care organizations, as well as what affects them, eg. Industry standards, best practices, trends, and access.

#### Semester 2

## Managing in a Health Care Setting (HCA117) (3 credits)

This course will allow the students to explore health care trends impacting the management of human resources. It supports students` growth as managers and leaders to respond to common human resource issues. Students will gain the knowledge and skills needed to effectively manage staff and support a positive organizational culture. They will learn about leading and managing within a unionized work environment.

## Innovation in Health Care (HCA118) (3 credits)

This course provides students with decision-making skills to lead or assist change within an organization. Students will learn how to engage in a variety of problem-solving methods, such as creative, rapid cycle improvement, Plan, Do, Study, Act (PDSA), and critical thinking. Students will apply these models to lead innovation and continuous improvement to concentrate on any healthcare quality issues or risks.

#### Legal Aspects of Health Care Administration (HCA119) (3 credits)

Health care in Ontario is based on laws which the students need to know in order to understand how

organizational governance, professional practice, and health care policies evolve. This knowledge will support the critical thinking required to develop resolutions to legal issues or risks associated with health care. This course is expected to guide students to realize the connections between quality, safety, and risk. Through the use of risk prevention & management methods, students will be empowered to be proactive in the identification of actual or potential risks and safeguard due diligence.

#### Critical Thinking & Evidence Informed Practices (HCA125) (3 credits)

Students will study a variety of sources for the important information and statistical data which serve as a basis for decision making. Evidence informed practice is a model which requires an administrator / leader to engage with research to guide decision making and best practices. Students will learn how to review and analyze research methodology, outcomes, and recommendations.

### Health Care Operations (HCA126) (3 credits)

This course will provide students with an understanding of the content in which health care organizations function. Students will also study management methods and receive resources to support operational activities. Areas of study will include: infrastructure management, supply chain and procurement, safety and security, occupational health and safety, emergency response planning, insurance and claims management.

### Capstone Project (HCA127) (3 credits)

Students will be expected to do a needs or gap assessment to identify a current issue recognized by health car administrators. Once identified, the topic will be research thoroughly using the literature, focus groups, and consultation with subject matter experts. A thorough analysis of the issue will be required and the students will develop an in-depth plan to respond to the problem. The knowledge acquired in all of the courses in the Program of Study for Health Care Administration will be utilized throughout this major project.

## Office Administration - Executive

Section B.25 6/2/2020

Ontario College Diploma (3 Semesters - 46 Weeks ) (2086) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

The Office Administration - Executive program is an accelerated course of study that will provide you with the opportunity to develop the skills and productivity tools needed to be a key part of the success in today's highly specialized offices. In only three semesters taken consecutively, you can master the skills and knowledge traditionally offered in a full two-year semester program, earning you an Ontario College diploma in only 46 weeks.

The program includes a work placement to ensure you have the experience and connections you need to succeed in business, while providing you with in-depth training in all major software applications including word processing, spreadsheets, presentation graphics, database management, desktop publishing, webpage design, the Internet, and automated accounting. Emphasis is also placed on developing your decision-making, interpersonal, and customer-service skills, so you can be ready to embrace the opportunities before you.

Best of all, by completing the program at a non-traditional time of year, you will enter the job market at a time when most others are not, giving you unique advantage in your job search in an increasingly competitive economy.

If you are a Canadian citizen or permanent resident and are currently unemployed, you may qualify for <u>Second Career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

A graduate of the Office Administration - Executive Program at Sault College will reliably demonstrate the ability to:

1. Conduct oneself professionally and adhere to relevant legislation, standards and codes of ethics.

2. Manage the scheduling, coordination and organization of administrative tasks and workflow within specific deadlines and according to set priorities.

3. Coordinate the collection, analysis, distribution and response to communications in the workplace to facilitate the flow of information.

4. Operate and provide support related to the use, maintenance and procurement of office equipment and technologies.

5. Evaluate, establish and administer a variety of records management systems to ensure confidential, secure, accessible and organized electronic and paper records.

6. Produce financial documents and reports by identifying and compiling relevant information and using accounting software.

7. Prepare and produce a variety of business documents using available technologies and applying industry standards.

8. Use interpersonal, leadership and client service skills to respond to diversity and to support the vision and mission of the organization.

9. Research, analyze and summarize information on resources and services and prepare summary reports with recommendations.

10. Select and use information technologies to support communication with internal and external stakeholders and to promote the organization.

11. Organize and coordinate meetings, conferences, special events and make travel arrangements, including the preparation of related documentation.

12. Support the implementation of projects by applying basic principles of project management.

#### **Reference**

Ministry of Training, Colleges and Universities Office Administration - Executive Program Standards (MTCU 52316), June 2015.

### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, Grade 11 Foundations for College Math (C) MBF3C, or mature student status.

#### ACADEMIC RECOMMENDATIONS

We recommend that students have basic keyboarding and computer skills, as well as spelling and grammar proficiency.

## **CAREER PATHS**

Graduates of the Office Administration - Executive program are prepared for a variety of positions. These include administrative assistant, executive assistant, office coordinator, information specialist, receptionist, clerk-typist, secretary, and records management clerk. Executive graduates may find employment in private industry, government agencies, and medical and financial institutions. You would also be prepared to take further studies at Sault College, Algoma University, or Lake Superior State University knowing that you have all the tools you will need for success. The International Association of Administrative Professionals (IAAP) is the professional organization that awaits you upon graduation.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$5,427.45	\$1,548.00	\$22,396.20	\$2,008.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

For more information, contact Program Coordinator Minttu Kamula at 705.759.2554, Ext. 2487 or email minttu.kamula@saultcollege.ca

## **PROGRAM OF STUDY**

#### Module 1 - 7 Weeks

MTH117-2 Business Mathematics OAD105-3 Applied Office Communications I OAD113-1 Office Fundamentals OAD115-5 Business Word Processing OAD116-4 Computer Essentials OAD106-3 Interpersonal Dynamics

### Module 2 - 7 Weeks

MTH117-2 Business Mathematics OAD105-3 Applied Office Communications I OAD108-4 Spreadsheets - Level I OAD113-1 Office Fundamentals OAD114-2 Administrative Office Procedures OAD118-2 Supporting Office Technology OAD106-3 Interpersonal Dynamics

#### Module 3 - 7 Weeks

OAD103-3 Employment Strategies OAD109-4 Database Management and Applications OAD110-4 Applied Office Communications II OAD125-5 Advanced Document Production

#### Select one of the following:

GEN110: Student Selected General Education

#### Module 4 - 7 Weeks

OAD103-3 Employment Strategies OAD110-4 Applied Office Communications II OAD126-4 Desktop Publishing OAD130-2 Social Media in the Workplace REC302-2 Records Management

#### Select one of the following:

#### GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### Module 5 - 7 Weeks

ACC126-2 Bookkeeping OAD209-4 Administrative Office Simulation OAD217-3 Integrated Research OAD300-3 Presentation Graphics OAD302-2 Career Experience I

#### Module 6 - 7 Weeks

ACC300-4 Automated Accounting OAD005-1 Keyboarding Speed Development OAD203-3 Event Management OAD206-3 Spreadsheets - Level II GEN100-3 Global Citizenship

#### Module 6 - 4 Weeks

OAD303-3 Career Experience II Note: Please note Students enrolled in OAD303 will participate in a four-week placement in August.

## **Course Descriptions**

Semester 1

### Module 1 - 7 Weeks

#### Business Mathematics (MTH117) (2 credits)

The student will study fractions, decimals, percentages, ratio and proportion, the metric system and conversion of units, and payroll calculations applying each of these to business problems. The course concludes with an introduction to statistics including preparing and interpreting graphs.

#### Applied Office Communications I (OAD105) (3 credits)

This course allows students to develop the high-level grammar skills necessary for the Office Administration profession. Students will gain an understanding of and appreciation for the correct usage of the English language through extensive practical application.

#### Office Fundamentals (OAD113) (1 credits)

Strong keyboarding and well-developed vocabulary skills are two essential skills needed by office professionals. This course will give students the opportunity to expand their vocabulary by mastering commonly misspelled business terms. Students will also use a keyboarding software program to practise and develop their keyboarding speed and accuracy. By the end of this course, students should be able to keyboard at a minimum speed of 30 gross words per minute with 98 percent accuracy.

#### Business Word Processing (OAD115) (5 credits)

This course is designed to provide the student with word processing and document formatting skills. The student will generate a wide variety of accurate business documents using efficient word processing techniques.

#### Computer Essentials (OAD116) (4 credits)

Office Administration professionals are required to be proficient and ethical in the use and operation of the personal computer to manage information and internal external communications at an advanced level. Students will work with the Windows operating system to perform computer-related office tasks and manage their computer, peripherals, networks, off-site access, and files effectively and efficiently. Outlook will also be studied to an advanced level as a complete time and information manager. In addition, students will use the Internet at an advanced level to research effectively. Appropriate use of information will be addressed to ensure an understanding of legislative requirements (Anti-Spam Legislation), as well as

the etiquette and formatting of online communications.

#### Interpersonal Dynamics (OAD106) (3 credits)

In this course, students will learn techniques to build and maintain effective relationships with customers, teammates, colleagues, and employers. Emphasis will be placed on self-knowledge and discovery. The skills needed to work in teams, make decisions, problem solve, and manage conflict will also be introduced.

## Module 2 - 7 Weeks

#### Business Mathematics (MTH117) (2 credits)

The student will study fractions, decimals, percentages, ratio and proportion, the metric system and conversion of units, and payroll calculations applying each of these to business problems. The course concludes with an introduction to statistics including preparing and interpreting graphs.

### Applied Office Communications I (OAD105) (3 credits)

This course allows students to develop the high-level grammar skills necessary for the Office Administration profession. Students will gain an understanding of and appreciation for the correct usage of the English language through extensive practical application.

#### Spreadsheets - Level I (OAD108) (4 credits)

The spreadsheet format is commonly used to track inventory, enter accounting transactions, and predict future business moves. Basic spreadsheet concepts such as entering different types of data into a spreadsheet program, saving files, and revising data will be introduced. Students will then continue on to utilize formulas/functions, print reports, and create and use charts/graphs.

### Office Fundamentals (OAD113) (1 credits)

Strong keyboarding and well-developed vocabulary skills are two essential skills needed by office professionals. This course will give students the opportunity to expand their vocabulary by mastering commonly misspelled business terms. Students will also use a keyboarding software program to practise and develop their keyboarding speed and accuracy. By the end of this course, students should be able to keyboard at a minimum speed of 30 gross words per minute with 98 percent accuracy.

#### Administrative Office Procedures (OAD114) (2 credits)

This course is an introduction to the basic office procedures and technology geared to reflect current changes in the workplace. Topics to be covered include human relations, time management, postal requirements, appointment scheduling, travel arrangements, meeting arrangements, telephone techniques, reference sources, and banking transactions.

#### Supporting Office Technology (OAD118) (2 credits)

Supporting and adapting to a rapidly changing workplace, especially in the areas of equipment and technology usage, maintenance, and procurement, are critical skills required by office professionals. In this course, students will identify existing and emerging technologies. As well, students will investigate and work with the supports available to operate, maintain, and support office equipment and technology.

#### Interpersonal Dynamics (OAD106) (3 credits)

In this course, students will learn techniques to build and maintain effective relationships with customers, teammates, colleagues, and employers. Emphasis will be placed on self-knowledge and discovery. The skills needed to work in teams, make decisions, problem solve, and manage conflict will also be introduced.

#### Semester 2

### Module 3 - 7 Weeks

#### Employment Strategies (OAD103) (3 credits)

Aimed at creating the tools needed for a successful job search, this course provides students with the latest job search techniques and includes such topics as planning the employment search; preparing resumes, cover letters, and other related correspondence; and developing effective interview techniques.

#### Database Management and Applications (OAD109) (4 credits)

This course will develop the student's knowledge of database software. Emphasis will be on designing and editing a table structure and forms; building queries; defining relationships; creating summary reports; performing calculations; and exporting, linking and importing data from other applications.

#### Applied Office Communications II (OAD110) (4 credits)

Advanced business communication skills are key to the role of the Office Administration professional. Emphasis is placed on efficient business writing for letters, memos, reports, and email.

#### Advanced Document Production (OAD125) (5 credits)

This course is designed to provide the student with advanced-level skills in word processing and document formatting with an emphasis on editing and proofreading techniques. The course offers a generic simulation which provides students with the opportunity to apply their word processing and editing skills. Use of a reference manual will reinforce grammar, style, formatting, and vocabulary skills.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Module 4 - 7 Weeks

#### Employment Strategies (OAD103) (3 credits)

Aimed at creating the tools needed for a successful job search, this course provides students with the latest job search techniques and includes such topics as planning the employment search; preparing resumes, cover letters, and other related correspondence; and developing effective interview techniques.

#### Applied Office Communications II (OAD110) (4 credits)

Advanced business communication skills are key to the role of the Office Administration professional. Emphasis is placed on efficient business writing for letters, memos, reports, and email.

#### Desktop Publishing (OAD126) (4 credits)

Continuing from the word processing basics, students will combine basic design principles and production techniques to produce a variety of printed material such as stationery, business cards, posters, newsletters, resumes, etc. A practical, hands-on approach will be taken with emphasis on producing professional materials, but specific desktop publishing terminology must be mastered. Students will make use of graphics, scanners, digital cameras, and specialty papers.

#### Social Media in the Workplace (OAD130) (2 credits)

Several key information technologies are used in the workplace to communicate with stakeholders and promote the organization, such as Twitter, Facebook, YouTube, and web pages. Students will select, develop, and maintain these online resources by contributing accurate, timely, and relevant content to social media sites in accordance with relevant guidelines in collaboration with others.

#### Records Management (REC302) (2 credits)

This course will provide students with an understanding of the scope and complexities of the administrative management of records. An extensive overview of file management techniques will be given, including a thorough review of the ARMA filing system.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 3

#### Module 5 - 7 Weeks

#### Bookkeeping (ACC126) (2 credits)

This introductory course covers bookkeeping basics including analyzing transactions, understanding debits and credits, journalizing transactions, and posting to the general ledger.

#### Administrative Office Simulation (OAD209) (4 credits)

Students will further develop their critical thinking and decision-making abilities as they complete a comprehensive office simulation. The emphasis of this course is on the development of editing and composition skills, the ability to work to a deadline, and the integration of advanced computer skills using database, spreadsheet, and word processing software.

#### Integrated Research (OAD217) (3 credits)

Students will apply research skills to prepare appropriate recommendations with supporting documentation for the procurement of ergonomic office furniture and equipment as well as information technologies for the workplace. A design layout for the office workspace will also be developed using available design software (e.g., Visio). Full APA references will be required in the complex business reports generated in this course.

#### Presentation Graphics (OAD300) (3 credits)

Effective communication through text, charts, graphs, and diagrams is fundamental in the business world. PowerPoint software will be used to prepare effective multi-media aids to enhance information for meetings, seminars, or lectures. Students will deliver an effective oral presentation using appropriate equipment and supporting material.

#### Career Experience I (OAD302) (2 credits)

In this seminar-based course, students begin preparing for the four-week work placement that occurs at the end of the third semester. Appropriate workplace behaviour and etiquette will be stressed.

#### Module 6 - 7 Weeks

#### Automated Accounting (ACC300) (4 credits)

Students will review basic bookkeeping theory and principles in order to complete data entry and application in Simply Accounting. Students will set up and work through business simulations. The process will include utilizing the general, payable, receivable, inventory, and project modules.

#### Keyboarding Speed Development (OAD005) (1 credits)

Students enrolled in this course will be expected to demonstrate keyboarding speed and accuracy using

touch typing techniques.

#### Event Management (OAD203) (3 credits)

This course teaches the strategies and organizational skills required to plan, organize, and administer conferences, meetings, and special events. In addition, students will develop minute-taking techniques needed to prepare effective minutes.

#### Spreadsheets - Level II (OAD206) (3 credits)

Students will continue to build their spreadsheet skills through using macros, linking, summarizing and consolidating worksheets, using pivot tables, and analyzing spreadsheet data.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Module 6 - 4 Weeks

#### Career Experience II (OAD303) (3 credits)

Building on the topics addressed in Career Experience I, emphasis will be on the professional responsibilities of the student while on placement. Suggestions for interacting effectively in the placement setting will be provided.

# Project Management

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (2176)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Project Management program provides theoretical and practical knowledge to manage projects in a timely and cost-effective manner. This highly sought after skillset provides valuable project management experience that is applicable across numerous industries. Closely aligned with the Project Management Institutes (PMI) Project Management Body of Knowledge (PMBOK) curriculum, the Sault College 8-month graduate certificate program introduces students to the systematic practice of managing individual and multiple projects through the application of current methods, tools, and technologies.

#### **PROGRAM OUTCOMES**

- 1. Manage the scope, cost, timing, and quality of the project at all times focused on project success as defined by project stakeholders.
- 2. Align the project to the organizations strategic plan, quality assurance processes and business justification throughout its lifecycle.
- 3. Define and manage the overall scope of the project, deliverables, constraints, performance criteria, benchmarks (including financial) and resource requirements in consultation with project stakeholders.
- 4. Implement project management knowledge processes, lifecycle and concepts, tools and techniques in order to achieve project success as defined by the stakeholder(s).
- 5. Adapt projects in response to issues that arise internally and externally providing creative and flexible solutions.
- 6. Interact with team and stakeholders in a professional manner, respecting differences to ensure a collaborative project environment.
- 7. Manage communications to ensure timely and appropriate generation, collection, dissemination, storage and disposition of project information to aid in the achievement of project objectives.
- 8. Implement general business concepts, practices, and tools to facilitate project success.
- 9. Apply appropriate legal and ethical standards in the planning of projects to meet industry and client expectations.
- 10. Adapt project management practices to meet the needs of stakeholders from multiple sectors of the economy (i.e., consulting, government, arts, media).
- 11. Apply project management practices to the launch of new programs, initiatives, products, services, and events relative to the needs of stakeholders.
- 12. Develop a comprehensive project plan that includes planning and control procedures, resource management, and risk management plans.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, Degree or equivalent.

## **CAREER PATHS**

#### **Possible Occupational Titles:**

- Project Manager
- Project Coordinator
- Project Leader
- Process Development Analyst
- Global Project Assistant Manager

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,025.80	\$1,117.00	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

For more information contact Program Coordinator John Cavaliere at 705.759.2554 ext 2764 or email john.cavaliere@saultcollege.ca

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

PMC101-3 Principles of Project Management PMC102-3 Project Cost and Procurement Management PMC103-4 Project Planning and Scheduling PMC104-3 Project Communication Management PMC107-3 Business Operations PMC108-4 Project Management and Tools

#### **SEMESTER 2**

PMC201-4 Project Leadership PMC202-3 Project Risk Management PMC203-6 Project Management Capstone Project PMC204-3 Project Scope Quality Management PMC205-4 Project Integration Simulation

## **Course Descriptions**

#### Semester 1

#### Principles of Project Management (PMC101) (3 credits)

This course guides and provides students through fundamental project management concepts, knowledge, tools, and key behavioral skills needed to equip them to succeed in achieving project objectives within time, cost and at the desired performance while utilizing the assigned resources effectively and efficiently and having the results accepted by the customer and stakeholders. In this course, students will be introduced to the different body of knowledge areas, process groups, including tools and techniques as

recommended by the Project Management Institute (PMI). Students will also be given practical and hands-on approach through class discussions, exercises, group discussions, assignments, and case studies.

#### Project Cost and Procurement Management (PMC102) (3 credits)

This course provides students with tools, techniques, and knowledge on fundamental principles of project costing and budgeting including a deep discussion around contract and procurement management. This course provides guidance on effectively managing the financial aspect of the project including assessing and choosing the right project mix using financial feasibility, tools for estimating and budgeting projects, earned value techniques for monitoring financial performance of projects, and financial reporting structures for overall governance. The course also covers procurement processes from the requirements stage to contract close out and will discuss Project Manager skills and behaviours needed to ensure project success.

### Project Planning and Scheduling (PMC103) (4 credits)

This course is designed to empower the student/practitioner with the skills and techniques required to plan and schedule the project resources throughout the project life cycle by using professional project management tools and techniques and deploying computer programs. The core topics include planning, estimating, budgeting, scheduling, monitoring and controlling the project and allocating resources to implement the project. Other techniques include scope planning, development of the WBS, developing schedules, network diagrams, allocation and leveling of project resources and earned value analysis.

### Project Communication Management (PMC104) (3 credits)

This course is designed to provide students with insight regarding project communications management, with a basis in the project body of knowledge. Communication is a critical element of successful projects and from initiation to closing, project managers must develop and execute integrated communications plans involving all project resources and stakeholders. Students will learn the core concepts as well as the tools and practices to be employed for effective project communications management.

#### Business Operations (PMC107) (3 credits)

This course is designed to provide non-business students entering the Project Management

(Post-Graduate Certificate) program with an understanding of the fundamentals of business

operations management and the role that it plays within an organization. In this practical

course, the students will develop an appreciation for the challenges in providing world-class

products, services, and the ability to use some analytical and conceptual framework to guide

their approach and thinking about business operations and project management. The students

will be able to discuss each topic in relation to their background and relate relevance of the

business concepts to their learning of Project Management.

## Project Management and Tools (PMC108) (4 credits)

This course is designed to empower the student/practitioner with the skills and techniques required to effectively implement project management tools and techniques throughout the project life cycle. The course will offer understanding and comprehensive knowledge so

student/practitioner will know when, where, and how to use the most effective project management resource depending on their project needs. The course will cover all tools and techniques associated with each process group. Students/practitioners will also be introduced to MS Project which remains to be a popular software of choice for companies dealing with project management activities.

#### Semester 2

### Project Leadership (PMC201) (4 credits)

This course is designed to help participants develop competencies by way of knowledge, skills and attitudes needed to perform effectively as members of project teams, as project managers or as functional managers who use projects as building blocks in the design and execution of organizational strategies. The emphasis is placed on how leadership and change management application can demonstrate how projects can be used to develop and execute strategic initiatives in preparing the organization for its uncertain future. The course emphasizes an integral view of projects involving cross-functional? and cross organizational teams as highly versatile strategic resources and key elements for strategic planning, organizing, motivating, directing and controlling projects. Topic areas include Leadership Models, Accountability, Leadership Assessment, Human Relations, Change Management, Social Responsibilities.

#### Project Risk Management (PMC202) (3 credits)

In this course, the processes and activities necessary to manage risk throughout a project life cycle will be identified and applied. Students will be exposed to practical exercises, tools and techniques for both qualitative and quantitative analysis for handling project risks. There will be an introduction to a comprehensive project risk management process/matrix that extends from initiation through to project completion and from risk symptoms to risk event impact. Critical to risk management success is the businesss ability to project risk alignment and mitigation strategies beyond the basic financial contingency approach.

#### Project Management Capstone Project (PMC203) (6 credits)

This course will allow students to use all of the skills introduced to initiate, plan, execute, monitor and control and close a simulated project under the guidance of the instructor. A final research paper and presentation will be required, exploring a project of interest emerging from the students individual/group program of study. Students will also be given direct feedback and learn techniques to increase effectiveness and efficiency of their project work using different concepts, tools, applications, and techniques commonly used in real-life project environment. Students will also be given practical and hands-on approach through class discussions, exercises, group discussions, assignments, and case studies.

#### Project Scope Quality Management (PMC204) (3 credits)

Understanding project scope and its relationship to managing project requirements and project quality are cornerstone activities for any successful project. Participants study how to identify, write, analyze and manage requirements for projects and how to develop effective scope statements and deploy proven quality management tools and techniques. The course emphasizes the relationship between project success, effective scope, and quality management.

#### Project Integration Simulation (PMC205) (4 credits)

This course provides students with rigorous simulation of the principles of project management by using

techniques that exposes and elaborates various aspects of project management through realistic situational learning. This course also aims to build students confidence to take a project from inception to a successful completion through hands-on case studies and classroom discussions. Course activities will also drive students excitement, understanding and retention of course concepts. Students will also be given practical and hands-on approach through exercises, group discussions and assignments.

## Public Relations and Event Management

Section B.27 6/2/2020

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (2170)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The program combines key skills and practical experience in both public relations and event management activities. It has the potential of increasing your employment opportunities with private and public sector organizations looking for well-trained public relations professionals who have the added skill set of event management expertise.

In eight short months, students in this program will learn successful public relations strategies and receive training in media relations, presentation skills, issues management and effective writing instruction. Public relations training will be combined with expert instruction in all facets of planning, executing and analyzing corporate and fundraising events. Guest speakers who are well-known in their respective fields further enhance the curriculum covered. Work placements nearing the end of the program will give students hands-on experience in the real world of public relations and managing events to further round out their studies prior to graduation. Potential employers recognise the value of hiring graduates of this program who can fill the important dual roles of public relations and event management within their organization.

#### **PROGRAM OUTCOMES**

## A graduate of the Sault College Public Relations and Event Management Program will reliably demonstrate the ability to:

- coordinate and contribute to the planning of public relations activities, including the development of clear, measureable communication objectives and project or tactical budgets and selection of strategies, tactics, tools and resources to manage a range of stakeholder relationships and issues and achieve organization objectives.
- 2. coordinate and contribute to and adapt the implementation of strategies and tactics and the management of budgets and resources to achieve communication objectives and meet activity guidelines and requirements
- 3. write and edit clear, accurate, targeted copy aligned to organizational objectives, appropriate for the chosen channel(s) and to a specified deadline
- 4. produce effective, accessible, and timely print, digital and multimedia communications, independently and collaboratively, to manage specific stakeholder relations and/or issues and achieve organizational objectives.
- 5. use research and analytical skills to guide the development of communication objectives and public relations activities, evaluate their impact, and support organizational objectives and stakeholder relationships
- 6. engage stakeholders by adapting language, tone and presentation style to the public relations purpose, situation, audience and channel(s).
- 7. comply with and support others to work in accordance with relevant professional association and industry codes of ethics, public relations professional standards and practices, and legal obligations, protocols and policies.
- 8. monitor emerging social and economic trends, and local, national and global issues to guide the planning and implementation of public relations strategies and tactics and support organizational

effectiveness, stakeholder relationships and ongoing personal professional development.

- 9. assess the selection and implications of current emerging technologies on the quality and delivery of public relations activities and on organizational effectiveness.
- 10. select strategies and tools to build and manage stakeholder relationships to support public relations activities, organizational objectives and career development.

#### Reference

Ministry of Training, Colleges and Universities, Public Relations and Event Management Program Standards (MTCU 70243), December 2014.

### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, University Degree or equivalent in a related program of study.

#### ACADEMIC RECOMMENDATIONS

Where formal post-secondary English is lacking, the minimum level of English acceptable is Grade 12 College Level English or Equivalent.

## **CAREER PATHS**

Graduates of the Public Relations and Event Management program will be able to provide potential employers with two in-demand skill sets in a strong marketplace.

Graduates roles could include corporate spokesperson, media relations, issues management, community relations, event management, government affairs, publicity and promotion, sponsorship and fund raising. Recent studies in the public relations industry indicate a continuing demand over the next several years for PR staff in business, charitable and non-profit organizations, and government at all three levels. This ongoing demand is combined with the fact many senior PR practitioners will be retiring from the industry in the next five years creating further job opportunities. Graduates will be well positioned to work towards professional accreditation from the Canadian Public Relations Society (CPRS) or the International Association of Business Communicators (IABC)

## MANDATORY FEES

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,025.80	\$1,117.00	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

For more information please contact Natasha Colak at 705-759-2554 Ext: 2828 or via email at Natasha.Colak@saultcollege.ca.

### **PROGRAM OF STUDY**

#### **SEMESTER 1**

PEM101-4 Professional Ethics PEM103-4 Public Relations Writing - Lab 1 PEM105-6 Event Logistics and Special Events PEM106-4 Media Relations/Social Media PEM107-4 Public Relations Strategies

#### **SEMESTER 2**

PEM200-4 Marketing of Events PEM201-4 Research as a P. R. and Event Tool PEM202-4 Sponsorship and Fundraising PEM203-6 Public Relations Writing - Lab 2 PEM205-3 Field Placement PEM206-4 Community and Stakeholder Relations

### **Course Descriptions**

#### Semester 1

#### Professional Ethics (PEM101) (4 credits)

This course focuses on the important role of professional ethics in all aspects of public relations and event management. Students will study the ethical standards established by the Canadian Public Relations Society (CPRS) and the International Association of Business Communicators (IABC) and learn how to apply those standards in public relations case studies as well as in-class PR scenarios.

#### Public Relations Writing - Lab 1 (PEM103) (4 credits)

This introductory course will provide detailed instruction on the development of key PR and event documents including news releases, fact sheets, backgrounders and event plans. Students will learn the strategic role each these documents play in supporting PR and event initiatives.

#### Event Logistics and Special Events (PEM105) (6 credits)

This course will provide the student with an understanding of how organizations use special events as an integral part of their overall public relations and marketing strategy and as an organizational tool. This course provides the student with the skill set necessary to plan, execute and measure special events. The course will examine each phase of a successful event which includes developing a theme/concept, building a comprehensive event plan and steps involved in planning and executing successful events. The focus is on event project management skills needed to research, design, plan, market, co-ordinate and evaluate. Special emphasis will be placed on the critical role public relations plays throughout the event management process. The students will examine the individual mechanics for these types of events and develop Public Relations objectives (SMART) to successfully position the event for delivering on its strategic plans.

#### Media Relations/Social Media (PEM106) (4 credits)

This course will examine the role of the media in public relations strategies and how to develop positive and effective media relations through a clear understanding of the needs and requirements of the media. The course will provide students with training in the Path of Least Resistance method of media relations with case studies and real life scenarios from the days headlines. Students will learn how to plan and execute a news conference taking into account all of the logistical details and potential issues. The course will also study the growing influence of the social media on media relations programs, and the relationship between mainstream media and twitter and blog world. Students will examine how organizations can utilize the social media as a communications and issues management tool while creating an awareness of the dangers and pitfalls of social media use. Students will receive hands-on experience in developing a social media strategy to support a classroom public relations project.

## Public Relations Strategies (PEM107) (4 credits)

This course will provide students with the history and development of public relations as a key operational component in organizations. Students will be provided with an opportunity to understand and create various public relations strategies aimed at reactively and proactively supporting the needs of their company, institution or organization. Students will gain an awareness of the importance of public relations planning within an organization through increased awareness of the organizations image, positive benefits to the community and stakeholders, and the management of issues. The course will provide students with the opportunity to examine and discuss real life examples of effective public relations strategies, and strategies that have failed. Students will gain an understanding of the critical role that events management plays in supporting all public relations strategies and planning.

### Semester 2

### Marketing of Events (PEM200) (4 credits)

Students will learn how to create a buzz in the community through innovative marketing plans designed to support corporate and stakeholder events. This course will lead students through the basic principles of what motivates the general public to attend and support events. The course will show students how to successfully market corporate, charitable and community events while meeting the goals and objectives of the Public Relations plan.

#### Research as a P. R. and Event Tool (PEM201) (4 credits)

This course will take students through qualitative and quantitative research processes and how they can be used as a valuable tool in all aspects of public relations and event management. Students will plan and conduct a focus group session with college students on assigned topics and learn how to utilize public opinion polling to support PR and event strategies. Research is a fundamental tool in the PR and event planning processes.

#### Sponsorship and Fundraising (PEM202) (4 credits)

Sponsorship programs and fund-raising activities depend heavily on successful public relations and event management strategies to reach their goals. Students will learn how to identify and motivate donors and will be responsible for planning and executing an actual fund-raising event on behalf of a local charity. Instruction will be also provided on seeking out sponsorship of events and development of strategic sponsorship guidelines.

#### Public Relations Writing - Lab 2 (PEM203) (6 credits)

This writing course take students to the next level of writing proficiency, following up on the first semester writing lab. This course will also introduce students to the basics of desktop publishing and will prepare

them to become corporate spokespersons through presentation skills training. Students will develop individual presentations on selected topics and address their classmates with powerpoint support.

#### Field Placement (PEM205) (3 credits)

The last four weeks of the Public Relations and Event Management program will have students placed with local organizations, institutions, businesses and charitable groups to provide public relations and event management support in a real-life setting. Past placements have included police departments, hospitals, boards of education, chambers of commerce and government offices.

#### Community and Stakeholder Relations (PEM206) (4 credits)

This course will provide students with an understanding of the importance of community and stakeholder relations in building, supporting and improving an organizations image. Students will learn to identify key stakeholder groups that need to be addressed in public relations and event plans. The course will examine specific strategies to build strong long-term relationships with community and stakeholder groups and will include in-class lectures by professionals in the field of community relations. Students will learn how to incorporate sponsored events into the stakeholder strategies to provided added value to public relations plans.

# Supply Chain Management

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (2180)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

The Supply Chain Management program is an eight month Ontario College Graduate Certificate designed for university and college graduates looking for a career in logistics and the supply chain management sector. Students will learn about manufacturing operations, purchasing, transportation and physical distribution in private and public industry. The program offers integration of negotiating skills, managerial accounting, professional communication, quality assurance and risk management, and value-added components to enhance global competitiveness. Graduates of the program will have a comprehensive background to pursue careers in procurement, logistics, planning, inventory management, transportation, customer service, customs coordination and related supply chain processes.

#### **PROGRAM OUTCOMES**

The graduate has reliably demonstrated the ability to:

- 1. Examine the connections between strategic objectives, stakeholder expectations, and supply chain design, functions, processes and roles, to guide decision-making, problem-solving and coordination of tasks.
- 2. Determine the value added and financial implications of supply chain decisions and design onoverall business profitability, efficiency and stakeholder satisfaction.
- 3. Ensure supply chain activities and transactions are compliant with relevant legal, regulatory and contractual obligations, and industry and organization standards and policies for quality, health, safety, accountability, social and environmental responsibility.
- 4. Use risk mitigation tools and strategies to inform supply chain management decisions
- 5. Contribute to the acquisition and sale of goods, services and materials in accordance with best practices and public and private sector stakeholder expectations across a variety of industries.
- 6. Contribute to the strategic planning and scheduling of material requirements, resource allocation and inventory for efficient production and fulfillment of customer orders and returns.
- 7. Coordinate the efficient handling and movement of goods, services, materials and related information within and between supply chains.?
- 8. Contribute to the identification and management of continuous improvements to functions and processes within and between supply chains.
- 9. Use available technologies to enhance work performance and support supply chain functions, processes, transactions and communications.
- 10. Monitor relevant trends, emerging technologies, and local and global economic, political and environmental issues to enhance work performance and guide management decisions.
- 11. Use leadership and communication skills to establish and manage strategic relationships with adiversity of stakeholders and support the achievement of business goals.
- 12. Develop and apply ongoing strategies for personal, career and professional development.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, Degree, or equivalent

Applicants whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.

# **CAREER PATHS**

#### **Possible Occupational Titles:**

- Purchasing agent or officer
- Inventory specialist
- Compliance specialist or manager
- Supply chain supervisor
- Customs agent, broker or specialist
- Tracking and scheduling coordinator
- Logistics coordinator
- Demand planner

#### **Occupational Areas:**

- Retail Operations
- Logistics Companies
- Transportation Industry
- Distribution centres
- Public and Private Sectors

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,025.80	\$1,117.00	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

ACC209-4 Managerial Accounting SCM101-3 Intro to Logistics & Supply Chain Mgmt SCM102-3 Analysis of Supply Market & Suppliers SCM103-4 Supply Chain Distribution Fulfillment SCM104-3 Logistics Operating Methods and Systems SCM105-3 Tech & Comp Apps in Supply Chain Mgmt

#### **SEMESTER 2**

SCM201-4 Global Supply Chain Management SCM202-3 Communicating in Supply Chain Management SCM203-4 Advanced Logistics & Transportation Mgmt SCM204-3 Customs, Compliance and Security SCM205-3 Employment & Career Preparedness

#### SCM206-3 Total Quality Management

# **Course Descriptions**

#### Semester 1

#### Managerial Accounting (ACC209) (4 credits)

In this course, students will learn how to effectively use the accounting information that is required by managers to plan, direct, and control the operations of their business organization. Students will gain an understanding of managerial accounting data pertaining to cost systems, cost behaviour, cost-volume-profit relationships, decision-making, and budgeting.

#### Intro to Logistics & Supply Chain Mgmt (SCM101) (3 credits)

This course introduces students to procurement, operations and logistics management in a coordinated and efficient corporate operation. Students are introduced to the management of the flow of products from raw material sourcing and acquisition through delivery to the final user.

#### Analysis of Supply Market & Suppliers (SCM102) (3 credits)

This course focuses on a analysis of supply march conditions, and will cover topics that support strategy development, contract negotiations and cost management initiatives.

#### Supply Chain Distribution Fulfillment (SCM103) (4 credits)

This course provides a comprehensive introduction to the process form product development through order receipt and delivery to consumer.

#### Logistics Operating Methods and Systems (SCM104) (3 credits)

This course evaluates the role of efficient logistics and transportation services, and the impact on corporate effectiveness. Topics include: risk management, security, customer service and order fulfillment, distribution operations, purchasing or operation of transportation services, third-party providers and customs documentation.

#### Tech & Comp Apps in Supply Chain Mgmt (SCM105) (3 credits)

This course examines various aspects of computer applications supporting logistics and supply chain processes, analysis and decision-making applications for planning and scheduling, data mining and research tools for supportive decision-making, and office suite applications for professional presentations and documents.

#### Semester 2

#### Global Supply Chain Management (SCM201) (4 credits)

This course examines the requirements for global operations and strategy development. Topics include sourcing products and services, compliance with best practices, and international and domestic laws and trade agreements. Similarities and differences of international and domestic operations will be explored.

#### Communicating in Supply Chain Management (SCM202) (3 credits)

This course focuses on the development and refinement of effective interpersonal communication skills, and includes advanced communication strategies, presentation and research skills, business document writing, meeting and management team strategies, business etiquette, and advanced employment communications including intercultural communication.

#### Advanced Logistics & Transportation Mgmt (SCM203) (4 credits)

This course provides an advanced analysis of logistics and transportation services, customer service, distribution operations, purchasing, order processing, facility design and operations, carrier selection, transportation costing, and negotiation.

#### Customs, Compliance and Security (SCM204) (3 credits)

This course discuses customs including the role of customs and border protection, supply security programs, export programs and tariffs, brokers, and trusted traders.

#### Employment & Career Preparedness (SCM205) (3 credits)

This course facilitates plans and processes to achieve a successful job search in the supply chain management industry including the development of targeted resumes and cover letters, identification of all relevant job search resources, learning effective interview skills and using social media as part of the job search process. This course also discusses personal and professional development strategies for growth and lifelong learning.

#### Total Quality Management (SCM206) (3 credits)

This course considers total quality management principles, practices, and techniques, and the relationship to manufacturing and competitive strategies.

# Community Integration Through Cooperative Education

Section B.29 6/2/2020

**Ontario College Certificate (2 Years - 4 Semesters ) (1120)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Community Integration through Cooperative Education (CICE) is a fully integrated two year College Certificate program designed to offer students with developmental disabilities or significant learning challenges opportunities to enhance their academic and social skills through participation in a variety of College courses and corresponding field placements.

HOW THE CICE PROGRAM WORKS

- 1. Choose one of the19 program areas of study available to be taken through the CICE program.
- 2. Develop vocational abilities through a number of field placement experiences that relate to each student's program area of study.
- 3. Learning Specialists provide students with in-class labs and shops support as well as tutoring outside (of) the classroom.
- 4. The Employment Liaison Officer secures field placements and provides intermittent supervision.
- 5. The curriculum is modified to meet the academic needs of each student.
- 6. Upon graduation, a CICE program Certificate is received and the graduate is provided with the opportunity to be linked with a Community Employment Support Specialist who will assist in the search for employment.

For more information please contact us!

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma (or) Certificate of Education, Achievement (or) Accomplishment (or) Mature Student Status.

Meet the CICE Community Integration through Cooperative Education program admission criteria, which will be mailed out once the application has been received.

#### **ADMISSION PROCEDURES & SELECTION PROCESS**

#### Pre-admission:

- 1. Fill out an Ontario college application form (online: www.ontariocolleges.ca)
- 2. Complete CICE admissions package.
- 3. Attend a personal interview.
- 4. Demonstrate academic needs that require curriculum modification.
- 5. Demonstrate a level of independence that does not require constant supervision.

#### Post-admission:

- 1. Attend a program orientation session.
- 2. Arrange for own transportation to and from the College and field placements. Due to the

uniqueness of the CICE program, certain field placements may not follow a traditional time frame.

- 3. Students must submit a completed Health Assessment form that is provided by the College. This assessment is a mandatory requirement for field placement and is required at the start of Semester. It is also recommended that students be vaccinated for Hepatitis B and have a flu shot.
- 4. A current Police Record Check will be required when instructed to do so by the Employment Liaison Officer. The cost is the responsibility of the student. A current criminal record does not necessarily prevent the student from engaging in field placement, but agencies and the College have the right to deny field placement based on an existing criminal record. Under certain circumstances, in addition to the Police Record Check, fingerprints and/or completion of a Vulnerable Sector Check may be required.
- 5. Field Placements which typically commence in the second semester, will only proceed when all required documents have been presented to the Employment Liaison Officer.

# **CAREER PATHS**

Graduates of the CICE program follow many paths. Some volunteer using skills they acquired while in college; many obtain rewarding part-time or full-time employment, and some choose to upgrade to meet the entrance requirements for other college programs. Graduates proudly share that their college experience provided them with the confidence and skills to make choices and pursue employment, continue their education, and get involved in the community.?

After graduating from the CICE program, Owen chose to upgrade and return to college to study Digital Film Production. He's an outstanding mentor for other students, and uses his amazing skills developed in college to advocate though presentations and film.

As a graduate, Tyler is proud to use his skills obtained at college to volunteer at the hospital, and be able to give back to his community by supporting people in need.?

As a graduate of the CICE program, Brandee obtained employment in her area of study and returned to college to further develop her skills and education. With her second diploma and work experience, Brandee continues to be gainfully employed in her field of study.?

At college Eric studied Construction through the CICE program, greatly enjoyed his Field Placement experiences, and upon graduation he gained employment at a building supply company.

Inclusion, community involvement, vocational skill building and academic abilities are all cornerstones of the CICE program at Sault College. Graduates gain confidence, relevant skills and empowerment that they carry with them every day on their journey, wherever opportunity takes them.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **CLINICAL/LAB OR FIELD PLACEMENTS**

All required documents for field placement must be completed and submitted eight weeks prior to commencing placement in Semester 2.

#### **OTHER INFORMATION**

Each program area of study includes student electives, in combination with mandatory courses, and field placement.

CICE graduates returning as extension students to take elective courses through the CICE program are not eligible for OSAP funding, so alternative funding is required. For more information, please contact?<u>student.financial.assistance@saultcollege.ca</u> or our general inquiry line of 705-759-2554, ext. 2704.

For more information contact Velma Simon, CICE Team Lead at 705 759-2554, Ext. 2437 or email velma.simon@saultcollege.ca

#### **PROGRAM OF STUDY**

#### SEMESTER 1

IVT110-6 Field Placement Preparation **Electives:** 

+ 3 courses in program area of study

#### **SEMESTER 2**

IVT130-12 Field Placement I IVT112-4 Self-Advocacy & Rights in the Workplace Electives:

+ 3 courses in program area of study

#### **SEMESTER 3**

IVT118-4 Self-Determination in the Workplace IVT131-12 Field Placement II Electives:

+ 3 courses in program area of study

#### **SEMESTER 4**

IVT128-4 Transitions to Work IVT132-12 Field Placement III **Electives:** + 3 courses in program area of study

#### **PROGRAM OF STUDY NOTES**

Note:

- 1. An Ontario College Certificate will be granted when a student completes 90 credits inclusive of core and elective requirements within the chosen program area of study.
- 2. Fieldwork and corresponding courses are co-requisites.

# **Course Descriptions**

#### Semester 1

#### Field Placement Preparation (IVT110) (6 credits)

This course will endeavor to prepare the student for the transitions from college to the field placement setting and the community. The growth and learning of the student will be supported and enhanced in the areas of job preparedness which include, but are not limited to personal hygiene, attire, confidentiality, individual responsibility, interpersonal communication, health and safety, and students rights and responsibilities not only as a student, but also within the college environment and the community. As a group, students will discuss a variety of techniques that will assist with the acquisition of skills necessary to participate in an effective, collaborative approach in the classroom and workplace setting. This introductory course aims to promote successful transition between College and community and interaction with College life. This course will also assist students to understand and maximize field placements that occur in subsequent semesters. Students will also gain a basic understanding of the purpose and techniques of appropriate APA documentation style.

#### Semester 2

#### Field Placement I (IVT130) (12 credits)

This course is designed to provide students with practical learning experience in their chosen academic program area of study. Students will be evaluated on their professional work habits, skill development and interpersonal communication skills. Students will understand the importance of and demonstrate self-advocacy skills as addressed within their seminar class, IVT-112 - Self-Advocacy and Rights in the Workplace.

# Self-Advocacy & Rights in the Workplace (IVT112) (4 credits)

This course is designed to assist the student in establishing his/her role within the field placement environment. Students will gain an understanding of the importance of self-advocacy, the government legislation that applies to student and employee rights. Student experiences and ideas, as well as suggestions for interacting and participating effectively, within field placement, will be exchanged. In addition, professional responsibilities, particularly reliability and confidentiality, will be emphasized through review of field placement packages.

#### Semester 3

# Self-Determination in the Workplace (IVT118) (4 credits)

This course is designed to assist the student in establishing his/her role within the field placement environment. The principles of this course are a continuation of IVT112 where the concept of self-advocacy now is put into action through self-determination in the workplace and within the college environment. In preparation for beginning a job search, students will develop comprehensive action plans to identify goals, skills, strengths, challenges and barriers to the workplace setting. A key component of this course is for the expression of skills and experiences and for students to 'know and value' one's self, and learn how to express him or her self in an affirmative manner. Student experiences and ideas, as well as suggestions for responsibilities, particularly reliability, accountability and confidentiality, will be emphasized through review of field placement packages.

#### Field Placement II (IVT131) (12 credits)

This course is a continuation of Field Placement I. Field Placement II is a third semester course and applies the concepts taught in IVT118 - Self-Determination in the Workplace. Students are supported and supervised while gaining vocational skills, professional work habits, and developing appropriate interpersonal skills in the field placement setting. Students will be encouraged to advocate and express one's self in an affirmative manner to address challenges and barriers in the work placement environment. Specific learning outcomes are developed at the onset of the field placement, and students are evaluated throughout the semester.

#### Semester 4

#### Transitions to Work (IVT128) (4 credits)

In this course, students will explore the transition from student to employee and gain an understanding of the differences between the practicum setting and workplace. This course is designed to consolidate information from the first three courses into this final course. Policies, legislation, processes, roles, responsibilities and expectations of both the employer and employee are themes that will be examined and discussed. Students will develop resume and interviewing skills through in-class activities. This will serve to prepare the students for future employment opportunities. In addition, field placement packages will be reviewed.

#### Field Placement III (IVT132) (12 credits)

This course is a continuation of Field Placement II. Field Placement III is a fourth semester course. Training will be at a higher level and students are expected to have good work habits and interpersonal communication skills. Students will consolidate the concepts obtained from the previous three semesters into this final field placement opportunity. Students will gain an understanding of the roles and responsibilities of both the employer and employee in regard to one's individual disabilities and barriers or challenges that may be faced. Specific learning outcomes are developed at the onset of the field placement, and students are evaluated on an ongoing basis with a mid-term and final evaluation.

# Child and Youth Care

**Ontario College Advanced Diploma (3 Years - 6 Semesters ) (1065)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Professional Child and Youth Care practitioners (CYCs) specialize in helping children, youth and families improve their lives. As a student, you will receive training in areas such as counselling, addictions, sexuality, recreation, mental health and special needs. Your courses will place a strong emphasis on practice and application, including four levels of supervised field placement in a variety of settings. Unlike many other colleges, we will provide you with field placements that are scheduled alongside your academic courses so you can practice and process what you are learning. Theory and application will be woven together throughout your training so you will have many opportunities to gain hands-on experience and learn from the experiences of others.

This program has a long history of innovation and uniqueness within the Province. The CYC program at Sault College will prepare you to positively affect the lives of children, youth and families throughout your career.

#### **PROGRAM OUTCOMES**

#### A graduate of the Child and Youth Care Program at Sault College will reliably demonstrate the ability to:

- 1. develop and maintain relationships with children, youth and their families applying principles of relational practice and respecting their unique life space, cultural and human diversity.
- 2. assess and respond to the strengths and needs of children and youth, including complex responses impacted by developmental, environmental, physical, emotional, social and mental health challenges in order to promote positive change.
- 3. analyze and evaluate the impact of the inter-relationship among family, social service, justice and community systems on children, youth and their families and use this information in the planning of holistic care and in the reduction of systemic barriers.
- 4. plan, implement and evaluate interventions using evidence-informed practices in the areas of therapeutic milieu and programming, and group work to promote resiliency and to enhance development in children, youth and their families.
- 5. advocate for the rights of children, youth and their families and maintain an anti-oppression perspective and cultural competence in diverse cultural contexts.
- 6. apply communication, teamwork and organizational skills within the interprofessional team and with community partners to enhance the quality of service in child and youth care practice.
- 7. develop and implement self-care strategies using self-inquiry and reflection processes to promote self-awareness and to enhance practice as a child and youth care practitioner.
- 8. use evidence-based research, professional development resources and supervision models to support professional growth and lifelong learning.

#### **Reference**

Ministry of Training, Colleges and Universities Child and Youth Care Program Standards (MTCU 60701) September 2014.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status.

#### ACADEMIC RECOMMENDATIONS

Child and Youth Care is a relationship-based profession that requires the ability to understand and engage with others in meaningful ways. The work can be deeply rewarding and satisfying but it does require both physical and emotional stamina. You will be called upon to recognize and respond to the physical, psychological and behavioural needs of children, youth and families, and to work effectively as a member of a professional team. You are best suited to this profession if you are enthusiastic, non-judgemental and sensitive to the needs and feelings of others.

# **CAREER PATHS**

Child and Youth Care practitioners work in treatment centres, group homes, schools, social agencies, hospitals, children's aid societies, youth programs, recreational programs, youth justice facilities, and community development. Some choose self-employment. Sault College Child and Youth Care graduates are well-trained in their profession and have the skills needed to get hired (e.g. interview skills, resume-writing skills, job-search skills). They enter a competitive market and succeed.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **CLINICAL/LAB OR FIELD PLACEMENTS**

#### **Placement Eligibility Requirements:**

All students are required to submit documentation of completion of placement eligibility procedures prior to entering field placement. If the appropriate documentation is not received by the CYC program deadline of mid-November in the first semester, you will not be eligible for fieldwork in the following semester. To be eligible for fieldwork and in accordance with the requirements of our community partners who facilitate your learning opportunities, all students must complete the following:

A current (within one year) Police Records Search is required by students as they will be enrolled in a program during which they will have unsupervised access to vulnerable persons. For detailed information regarding the specifics and process, please refer to the `Police Records Search Procedure`. All costs associated to these requirements are the responsibility of the student.

Immunization & Health Record Form:

This form includes the following immunization requirements:

- Immunity against measles, mumps, and rubella
- Current tetanus-diphtheria

The student must sign a Statement of Confidentiality Form.

Current Certification in CPR (Level C) and First Aid, and WHIMS

We strongly recommend that applicants, for their own personal safety, receive the Hepatitis B vaccine and maintain a current influenza immunization. However, these are not requirements for entry into the program.

# **EDUCATIONAL PATHS**

If you want to pursue a University Degree after graduation, or if you already hold a related University Degree or College Diploma, the following options will be of interest:

# Get a Degree; CYC Diploma for University Graduates; CYC Diploma for ECE Graduates; CYC Diploma for SSW/SSWN Graduates

If you have finalized all academic requirements for a CYC advanced diploma from another Ontario college, but wish tocomplete your placement requirements through a unique northern experience, information about aSeptember to Aprilplacement pathway can be found under the following heading:

#### **Placement Completion Option for CYC Transfer Students**

#### 1. Get a Degree

For students who choose to continue their education after graduation, the Sault College Child and Youth Care Program and Algoma University here in Sault Ste. Marie have one of the best College-to-University Credit Transfer Agreements in the Province, allowing our graduates to complete a Bachelor's Degree in Psychology at Algoma in just one academic year, dependent on GPA. Additional information on the process to transfer credit is available on the Algoma University website. Similar opportunities for advanced standing exist at other Universities and Colleges including Windsor, Ryerson, Athabasca, Griffith University and Humber College.

#### 2. CYC Diploma for University Graduates

If you have a degree in Psychology, but lack specialized field experience, our Degree Plus Diploma option may be for you.

In one academic year, you can achieve a three year Diploma that is accredited by the Provincial Ministry of Advanced Education and Skills Developmentand recognized throughout Canada. You will acquire practical skills and meaningful field experience under the supervision of well-qualified mentors. In addition, you will become eligible to apply for full professional membership in the Ontario Association of Child and Youth Care (OACYC).

A Child and Youth Care Diploma will complement your theoretical knowledge and enhance your employability by providing you the specialized skills and credentials to work with children, adolescents and families in a broad range of settings.

#### **Entrance Requirements**

- BA in Psychology from an Accredited University
- Overall B average in area of concentration
- Current Resume (including volunteerism, workshops, PD activity)
- Placement Eligibility (as per College/Program requirements)
- Academic advisement interview with CYC Program Coordinator or Designate.

#### \* Course of Study

#### Semester A (Fall)

- CYC200-3 Integrated Seminar II
- CYC206-3 Child Care Methods III
- CYC302-9 Community Practicum III
- CYC202-3 Counselling Skills I
- GEN100-3 Global Citizenship
- CYC203-3 Group Dynamics I
- CYC300-3 Family Dynamics

#### Semester B (Winter)

- CYC251-3 Group Dynamics II
- CYC252-3 Youth in Conflict with the Law
- CYC253-3 Counselling Skills II
- CYC254-3 Abuse & Family Violence
- CYC250-3 Psychopathology 1A
- CYW326-7 Community Practicum IV
- CYC351-3 Integrated Seminar IV

In order to maximize learning opportunities for University graduates, CYC200 and CYW307 will be considered co-requisites in the fall semester, for these applicants only.

\* Individual maps may vary somewhat based on prior experience and/or the particular course content of specific degrees, but will comprise no less than 52 required credits overall. These determinations will be made in consultation with the Program Coordinator at the time of application.

#### **Registration Notes**

Following the academic advisement interview you will apply to CYC through the OCAS process. Once accepted, you will then be manually streamed to the correct semesterand enrolled in your required courses. Further information can be obtained through the Office of the Registrar and the Financial Aid office.

This opportunity is specific to persons with a BA in Psychology but applicants with related degrees will be considered on an individual basis. In these circumstances, block transfers of credit may be reduced. For applicants who do not meet the minimum academic requirements, the credit transfer process may be limited to a course to course basis. All program offerings are subject to sufficient enrolment. Published information is subject to change without notice.

#### 3. CYC Diploma for ECE Graduates

As a graduate of an Early Childhood Education Diploma program, you have acquired extensive experience and knowledge in supervised child-centred practicum settings and you have a strong understanding of creative expression, teaching methods, professionalism, program planning and child development. In acknowledgement of your prior learning, and in recognition of the broad foundational and philosophical commonalities between our programs, ECE graduates will receive advanced standing equivalent to one full year of study in the three year Child and Youth Care program at Sault College.

\*Individual maps may vary somewhat based onthecourse content and sequencing of specific diploma programs. These determinations will be made in consultation with the Program Coordinator at the time of application.

A Child and Youth Care Diploma will complement your ECE training by providing you the necessary skills and credentials to work effectively with older children, adolescents and families in a variety of circumstances. You will be trained in the specific applications of counselling, group dynamics and case management skills that are central to Child and Youth Care. As a dual Diploma graduate, you will be more diverse in your skill sets and better qualified to seek employment in a broad range of settings.

#### **Entrance Requirements**

- Early Childhood Education Diploma from an Accredited College
- CPIC and Health Documentation (as per College/Program requirements)
- Academic advisement interview with CYC Program Coordinator or Designate

#### **Program Duration for ECE Diploma Graduates**

The duration of the advanced standingoption for ECE graduates is four semesters with a September start.

#### **Registration Notes**

Following the academic advisement interview you can apply to Semester One through the OCAS process. Once accepted, you will be manually enrolled in your required courses. Further information can be obtained through the Office of the Registrar and the Financial Aid office.

This opportunity is specific to persons with an ECE Diploma. Applicants who wish to transfer from ECE to CYC prior to completion will continue to access and transfer credit according to the established format. All program offerings are subject to sufficient enrolment. Published information is subject to change without notice.

#### 4. CYC Diploma for SSW/SSWN Graduates

As a graduate of a Social Service Worker Diploma program, you have acquired extensive experience and knowledge of ethical practice, professionalism and social understanding from a generalist perspective. In acknowledgement of your prior learning, and in recognition of the broad foundational and philosophical commonalities between our programs, SSW graduates will receive advanced standing equivalent to one full year of study in the three year Child and Youth Care program at Sault College.

\*Individual maps may vary somewhat based onthecourse content and sequencing of specific diploma programs. These determinations will be made in consultation with the Program Coordinator at the time of application.

A Child and Youth Care Diploma will complement your SSW training by providing you the specialized skills and credentials to work effectively with children, adolescents and families in a variety of circumstances. You will be trained in youth and family oriented applications of counselling, group dynamics and developmental processes that are central to Child and Youth Care. As a dual Diploma graduate you will be more diverse in your skill sets and better qualified to seek employment in a broad range of settings.

#### **Entrance Requirements**

- SSW Diploma from an Accredited College
- CPIC and Health Documentation (as per College/Program requirements)

• Academic advisement interview with CYC Program Coordinator or Designate

#### Program Duration for SSW/SSWN Diploma Graduates

The duration of the advanced standing option for SSW graduates is four semesters with a September start.

#### **Registration Notes**

Following the academic advisement interview you can apply to Semester One through the OCAS process. Once accepted, you will be manually enrolled in your required courses. Further information can be obtained through the Office of the Registrar and the Financial Aid office.

This opportunity is specific to persons with an SSW or SSWN diploma. Applicants who wish to transfer from SSW/SSWN to CYC prior to completion will continue to access and transfer credit according to the established format. All program offerings are subject to sufficient enrolment. Published information is subject to change without notice.

#### 5. Placement Completion Option For CYC Transfer Students

If you have finalized all academic requirements for a CYC advanced diploma from another Ontario college, but wish to complete your placement requirements through a unique northern experience, we offer a September to April option that is equivalent to four levels of community practicum. Once you have successfully completedyour two block placement experiences and their accompanying seminar courses, you will be eligible to graduate with a CYC Diploma from Sault College. Most significantly, your professional qualifications will be enriched and supported by a real experience of relational practice in a northern context.

The courses required for this option are as follows:

Fall

CYC306-21 Community Practicum V: Block 1 - and - CYC301-3 Seminar 111

#### Winter

CYC355-22 Community Practicum V1: Block 11 - and - CYC351-3 Seminar 1V

#### **Registration Notes**

Following the academic advisement interview with the program coordinator or designate, you will apply to the Sault College CYC through OCAS. Once accepted, you will then be manually streamed to the correct semester and enrolled in your required courses. Further information can be obtained through the Office of the Registrar and/or the program Coordinator.

This opportunity is specific to persons who have successfully completed all academic requirements for graduation from a three year CYC Diploma program at another Ontario College, *with the exception of their field placement requirements.* If you do not meet the stated criteria, the credit transfer process may be limited to a course to course basis. This stream of study is subject to sufficient enrolment and departmental approval. Published information is subject to change without notice.

#### Degree Plus Diploma Poster

# **OTHER INFORMATION**

\*\*Please Note: This is the new program name and number for students entering the program in September 2015\*\*. It was formerly called Child and Youth Worker. (Program #1055)

For more information contact Program Coordinator Melanie Jones at 705.759.2554, ext 2548 or email: melanie.jones@saultcollege.ca.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM110-3 College Communication Skills CYC100-3 Introduction to Human Relations CYC101-3 Substance Use Continuum CYC102-4 CYC Methods I: Intro to Profession PSY102-3 Introduction to Psychology GEN100-3 Global Citizenship

#### **SEMESTER 2**

CMM225-3 Human Services Communication CYC150-3 Integrated Seminar I CYC151-7 Community Practicum I CYC152-3 Therapeutic Recreation CYC153-3 Child and Adolescent Development I CYC154-3 Addictions: Evidence Informed Practice CYC155-3 CYC Methods II: Behavioural Intervention

#### **SEMESTER 3**

CYC200-3 Integrated Seminar II CYC201-9 Community Practicum II CYC202-3 Counselling Skills I CYC203-3 Group Dynamics I CYC204-3 Child and Adolescent Development II CYC205-3 CYC Family Practice CYC206-3 CYC Methods III: Case Management

#### **SEMESTER 4**

CYC250-3 Psychopathology of Childhood and Adolescence I CYC251-3 Group Dynamics II CYC252-3 Youth In Conflict with the Law CYC253-3 Counselling Skills II CYC254-3 Abuse and Family Violence

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 5**

CYC300-3 Family Dynamics CYC301-3 Integrated Seminar III CYC302-9 Community Practicum III CYC303-3 Psychopathology of Childhood and Adolescence II CYC304-3 Working with Diverse Populations CYC305-3 CYC Methods IV: Trauma Focused Therapies

#### **SEMESTER 6**

CYC350-3 Human Sexuality CYC351-3 Integrated Seminar IV CYC352-3 Working with Gender and Sexual Minorities CYC353-9 Community Practicum IV CYC354-4 Community Development SSC102-3 Introduction to Aboriginal Peoples of Canada

# **Course Descriptions**

#### Semester 1

#### College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Introduction to Human Relations (CYC100) (3 credits)

This course introduces students to principles and practices of effective human relations with particular emphasis on professional applications in Child & Youth Care. Students will have opportunities to integrate theory and skill development in interpersonal communications and self-understanding.

#### Substance Use Continuum (CYC101) (3 credits)

This course introduces the student to the continuum of substance use and the impact of substance dependence. Students will develop an understanding of substance use, abuse and dependence on individuals and as a social issue, from a Child and Youth Care perspective.

# CYC Methods I: Intro to Profession (CYC102) (4 credits)

This course introduces students to the field of Child and Youth Care including a review of professional knowledge, skills, and attitudes that are uniquely those of the competent Child and Youth Care practitioner. The course prepares students for fieldwork experiences in educational settings and introduces them to skills and issues related to observation, reporting, policies and ethics, and confidentiality.

#### Introduction to Psychology (PSY102) (3 credits)

A study of the science of psychology; its methods, concepts and theories, including the following topic areas: (1) biological bases of behaviour and perceptual processes; (2) intelligence, learning and memory; (3) motivation and emotion, and (4) states of awareness. Psychological concepts will be studied with a view towards how they can be applied to enhance the student's understanding of psychological adaptation and the cases and consequences of human behaviour.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social

injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 2

#### Human Services Communication (CMM225) (3 credits)

This course prepares students for employment in the human service professions. Emphasis is placed on career exploration and the production of a variety of written and oral communications suited for the various purposes and audiences relevant to this profession. In this course, the principles of writing are taught through the writing process.

#### Integrated Seminar I (CYC150) (3 credits)

This course is a co-requisite to Community Practicum I. Its focus is on professional skill development, with a particular emphasis on relational practice, communication, identification of personal and professional goals, and developing and implementing strategies that promote positive behavioural outcomes for children and youth.

#### Community Practicum I (CYC151) (7 credits)

This is the first level of field placement in the Child and Youth Care program. Its emphasis is on the integration of theory and practical experience and the development of the student as a professional Child and Youth Care Practitioner

#### Therapeutic Recreation (CYC152) (3 credits)

Therapeutic Recreation is designed to familiarize students with a wide range of therapeutic recreational activities and the use of same in achieving identified goals for general and/or specific client populations. Emphasis is placed on providing clients with opportunities for personal growth and development through therapeutic recreational experiences.

#### Child and Adolescent Development I (CYC153) (3 credits)

Part 1 of this course provides an intensive study of the psychological, cognitive, physical and social development of the child from conception to early childhood. Psychological concepts, theories and research will be examined in relation to the child's development. The application of theory and research to the problems of childhood will be discussed.

#### Addictions: Evidence Informed Practice (CYC154) (3 credits)

This course addresses the role of the Child and Youth Care Practitioner in supporting children, youth and families impacted by addictions. Its emphasis is on intervention strategies in the areas of therapeutic programming, individual counselling and group work pertinent to treatment aims for the client.

#### CYC Methods II: Behavioural Intervention (CYC155) (3 credits)

This course focuses on behavioural interventions and techniques that are reflective of Child and Youth Care Methodology and relational practice. The course will prepare students to understand and respond to the emotional and behavioural needs of children and youth in ways that promote positive change and self-regulation.

#### Semester 3

#### Integrated Seminar II (CYC200) (3 credits)

This course is a co-requisite to Community Practicum 2. Its focus is on professional skill development, with a particular emphasis on prevention and intervention strategies for youth-at-risk, and standards of professional conduct. Students will use self-reflection activities, self-care processes and responsiveness to feedback as tools for enhancing their own professional competence.

#### Community Practicum II (CYC201) (9 credits)

This is the second level of field placement in the Child and Youth Care program. Its emphasis is on the integration of theory and practical experience and the development of the student as a professional Child and Youth Care Practitioner.

#### Counselling Skills I (CYC202) (3 credits)

This course is an introduction to CYC counselling competencies and processes. It is designed to introduce the student to the techniques of the helping interview. Emphasis is on strength-based approaches, hands-on skill development, and the implications of self-awareness to a helping interview. Extensive practice will occur to reinforce the skill orientation of the course.

#### Group Dynamics I (CYC203) (3 credits)

This course examines current research and theory in understanding group roles and function. Various group techniques and approaches will be explored in an experiential context to enable the student to develop entry-level skills in working effectively with groups. An emphasis is placed on understanding the individual within the group and each student will be encouraged to examine his/her own personal traits and skills in order to develop and implement a strategy to enhance these in the professional context.

#### Child and Adolescent Development II (CYC204) (3 credits)

This course is a continuation of Child and Adolescent Development 1. It provides an intensive study of human development from middle childhood to the end of adolescence. Included will be an examination of psychological, physical, cognitive and social growth and development. In some instances, abnormal development and behaviour will be contrasted with normal patterns.

# CYC Family Practice (CYC205) (3 credits)

This course introduces students to the Child and Youth Care perspective on working with families in their daily lives. Students will examine the behavioral, developmental and psycho-social strengths and needs of children, youth and families in relation to their current family environments. Practical application of strategies and assessment tools appropriate to the family environment will be introduced.

#### CYC Methods III: Case Management (CYC206) (3 credits)

This course examines various aspects of the therapeutic process with primary emphasis on children and youth and their psychosocial needs. There will be a detailed examination of and practice with the assessment process as it relates to program planning and development. Emphasis will be placed on the concept of comprehensive psychosocial enhancement. In that regard, case management issues ranging from access to evaluation will be studied with a view to further defining and developing the Child and Youth Care Practitioner's role in the therapeutic process.

#### Semester 4

Psychopathology of Childhood and Adolescence I (CYC250) (3 credits)

Various disorders of childhood and adolescence will be examined from a holistic perspective (including biological, psychological and social factors). Each disorder will be explored intensively with respect to its impact on the individual, the family and the community. Extensive examination of symptoms, causes, treatment and prevention approaches will be included. Special emphasis will be placed on assessment, case formulation and intervention strategies from the Child & Youth Care perspective.

#### Group Dynamics II (CYC251) (3 credits)

This course is designed to build on the skills developed in Group Dynamics I. Opportunities will be provided for the individual student to demonstrate and develop skills in group leadership and group programming. The course will focus on the CYC practitioners role and the therapeutic interventions that are possible and/or feasible in groups.

#### Youth In Conflict with the Law (CYC252) (3 credits)

This course provides a practical orientation to the Youth Criminal Justice Act, including a review of origins and philosophical principles and how legislation is operationalized, with an emphasis on the local service delivery system. It examines the role of the CYC in the prevention of youth crime as well as in intervention at the community level. It focuses particularly on treatment of youth in conflict with the law, including both general and specific programming techniques.

#### Counselling Skills II (CYC253) (3 credits)

As follow up to Counselling Skills I, this course is designed to promote further development of dimensions of helping. New skills in supporting and motivating clients toward their identified goals will be added to the existing framework of attending skills. Client-centered skills are examined further with a particular focus on intentional applications.

#### Abuse and Family Violence (CYC254) (3 credits)

This course examines issues of abuse and family violence from both a personal and a societal perspective. There is a particular emphasis on the role of the professional CYC in providing support and intervention, and a review of best practices in assessment, treatment and prevention.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 5

# Family Dynamics (CYC300) (3 credits)

In this course, students examine various evidence-based methodologies and review a representative sampling of family interventions. The course has a practical orientation as various aspects of parenting within the present societal demands of family life are explored. A focus on interventions geared specifically to building strengths within the family is a key component of the course. Social factors impacting families will also be reviewed.

# Integrated Seminar III (CYC301) (3 credits)

This course is designed as a follow-up to your previous Integrated Seminar courses, and as a co-requisite to Community Practicum III. Its focus is on the articulation of the prevention and intervention strategies utilized in the field and related to the issues of youth, their families and their communities, as well as one's own professional development as a CYC Practitioner.

#### Community Practicum III (CYC302) (9 credits)

This course is one of two senior levels of Community Practicum training in the Child and Youth Care Program. Its emphasis is on the integration of theory and practical experience and the further development of the student as a professional Child and Youth Care Practitioner.

#### Psychopathology of Childhood and Adolescence II (CYC303) (3 credits)

This course is a continuation of Psychopathology of Childhood and Adolescence I. It builds on prior competencies and examines a range of disorders of childhood, adolescence and young adulthood not previously addressed. These psychopathologies will be examined from a holistic perspective and explored intensively with respect to their impact on the individual, the family and the community. Extensive examination of symptoms, causes, treatment and prevention approaches from the Child and Youth Care perspective will be included.

#### Working with Diverse Populations (CYC304) (3 credits)

This course focuses on the student's ability to understand and respond effectively to multicultural and cross-cultural issues, and issues of diversity and human rights as pertinent to the work of a Child & Youth Care Practitioner. There will be particular emphasis on self-awareness and skill development in planning and implementing therapeutic approaches for building bridges and resolving conflicts within the context of a diverse and multicultural society.

# CYC Methods IV: Trauma Focused Therapies (CYC305) (3 credits)

This course examines various therapeutic approaches and philosophies with a particular emphasis on current best practices in trauma focused therapies. It includes opportunities for extensive practice and application of techniques and strategies, and builds on students` prior knowledge and training in counselling skills and developmental processes.

#### Semester 6

#### Human Sexuality (CYC350) (3 credits)

This course explores human sexuality from a variety of perspectives, including physical, emotional, environmental and societal influences. Its purpose is to provide students with the necessary knowledge, skills and attitudes to support children, youth and families in developing and maintaining safe and healthy relationships.

#### Integrated Seminar IV (CYC351) (3 credits)

This course is designed as follow-up to the previous Integrated Seminar course, and as a co-requisite to Community Practicum IV. Its focus is on the students growth and development both personally and professionally. The concept of professionalism will be explored with respect to career planning, commitment, communication and ethics. Self-assessment, interview skills and employment preparedness will be emphasized.

#### Working with Gender and Sexual Minorities (CYC352) (3 credits)

This course prepares students to work effectively with children, youth and families who are gender and sexual minorities. The focus will be on developmental issues, use of sensitive and direct questioning techniques, strategies for engagement, support and creating safe spaces. Students will become familiar with best practice models in assessing specific needs of these clients, engaging in positive treatment planning, making appropriate referrals, and advocacy.

#### Community Practicum IV (CYC353) (9 credits)

This course is one of two senior levels of Community Practicum training in the Child and Youth Care Program. Its emphasis is on the integration of theory and practical experience and the further development of the student as a professional Child and Youth Care Practitioner.

#### Community Development (CYC354) (4 credits)

This is an experiential course that focuses on building healthy communities through processes that are inclusive, self-determining and community driven. The course includes a theoretical orientation to best practices in community development together with extensive opportunities for practical application and direct skills training. There will be a particular emphasis on professionalism, creativity and commitment.

#### Introduction to Aboriginal Peoples of Canada (SSC102) (3 credits)

This course will provide participants with an introduction to the history and cultural survival of Canada's Aboriginal people. Aboriginal worldview will be identified and discussed in both historical and modern perspectives. Students will review colonization, government policies and legislation, which provide a foundation for understanding modern Aboriginal life in Canada.

# Early Childhood Education

Ontario College Diploma (2 Years - 4 Semesters ) (1030) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

The Early Childhood Education Program is designed to prepare you for a position in the Early Childhood Education/Early Years field. You will have the knowledge and practical skills needed to plan and implement developmentally appropriate programs for children birth through 12 years of age. You will also be skilled in working with families and providing family educational programming. Our well-known and highly regarded program is one of the only in Ontario delivering training in Learning Language and Loving It - The Hanen Program for Early Childhood Educators/Teachers. The Learning Language and Loving It program is a research based, developmental approach to promote children's social, language and literacy development. Students also gain unique hands-on experience in our onsite child development centre giving you an edge when seeking employment. With an ECE diploma, you will be eligible to register with the College of Early Childhood Educators (CECE) and use the title of Registered Early Childhood Educator (RECE)

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

# A graduate of the Early Childhood Education Program at Sault College will reliably demonstrate the ability to:

1. Create learning contexts to enable, build and maintain caring, responsive relationships in partnerships with children, families and communities that value and respect social, cultural and linguistic diversity including Indigenous peoples` worldviews and Francophone identity.

2. Co-create, facilitate and reflect upon inquiry and play-based early years and child care programs and pedagogical approaches to support children's learning, holistic development and well-being following children's capabilities, interests, ideas and experiences.

3. Co-design and maintain inclusive early learning environments to value and support equitable, accessible and meaningful learning opportunities for all children, their families and communities in a range of early years and child care settings.

4. Collaborate with children, families, colleagues, agencies and community partners to create, maintain, evaluate and promote safe and healthy early learning environments to support independence, reasonable risk-taking and healthy development and well-being.

5. Use observation strategies to identify children's strengths and challenges and to ascertain when children and families might benefit from additional support or community resources.

6. Use professional communication in interactions with children, families, colleagues, employers, the regulatory body, government authorities and children's service agencies to meet legal and ethical standards of the early years sector.

7. Act in accordance with relevant legislation, regulations, College of Early Childhood Educators Code of

Ethics and Standards of Practice, agency policies and procedures and principles of evidence-informed practice and reflect upon their impact on one's own role in early years and child care settings.

8. Identify, report and document when a child is in a situation of perceived risk for, or actual neglect or abuse, in accordance with legislation, the College of Early Childhood Educators Code of Ethics and Standards of Practice, policies and procedures.

9. Create and engage in partnerships with families, communities, colleagues, inter-disciplinary professionals, authorities and child service agencies to advocate for quality early years and child care programs and services.

10. Engage in reflective practice and continuous professional learning in accordance with principles of lifelong learning, evidence-informed practices in the early years sector and requirements of the College of Early Childhood Educators.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status.

#### ACADEMIC RECOMMENDATIONS

In order to gain insight into the profession, we suggest that you visit an early learning program in your community. Early Childhood Educators are working daily with children and families. It is a profession that is very physically and emotionally demanding. You will be involved in lifting children, materials and equipment. You need to be able to respond quickly and calmly within the indoor and outdoor environments to ensure children's on-going emotional and physical well-being. Your composed and realistic approach will be helpful in your interactions with families and community professionals.

# **CAREER PATHS**

As a graduate and upon registration with the College of ECE, you may refer to yourself as an Early Childhood Educator and work in a variety of settings.

These include but are not limited to:

- Half day and full day licensed infant, toddler, preschool and after- school programs
- Ministry of Education Full Day Early Learning Kindergarten programs
- Parent resource centre programs
- Inclusive settings with children with disabilities/special needs.

Other employment options that you may wish to pursue are as:

- An educational assistant or literacy educator for the school board
- · Other roles in the community working with children and families

You are also encouraged to seek certification through your professional organization - the Association of Early Childhood Educators, Ontario (AECEO). For more information and membership requirements, contact the AECEO.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **CLINICAL/LAB OR FIELD PLACEMENTS**

You will be required to submit documentation of having completed the following procedures prior to entering your field placement. If the appropriate documentation is not received at least two weeks prior to the start of the field placement, it may be necessary to withdraw from the course.

A current (within six months) Police Records Search is required, since you will be enrolled in a program where you will have access to vulnerable people. For detailed information regarding the specifics and process, please refer to the `Police Records Search Procedure`. You are responsible for all costs associated with these requirements.

#### Immunization and Health Record Form:

This form includes the following immunization requirements:

Immunity against measles, mumps and rubella

- Current tetanus-diphtheria
- You will also be required to sign a Statement of Confidentiality Form.
- CPR (Level C), WHMIS, and First Aid Certificates are required. You must provide copies of your certification prior to starting your field placement.

Over your time in the ECE Program at Sault College, you will experience a variety of placements with children of differing age groups. These placement agencies are diverse and provide different opportunities to learn new skills in preparation for your professional career. You will work closely with Registered Early Childhood Educators and other professionals in community services, so that you learn the breadth of the profession and the services available to children and families in the community.

Some examples of some of the placements that you may experience are:

- Licenced infant, toddler, preschool or after-school programs
- Full Day Early Learning Kindergarten programs
- Best Start Hub programs
- Children's Rehabilitation Centre
- Infant Child Development Program
- Waabinong Aboriginal Head Start program

# **EDUCATIONAL PATHS**

Opportunities for transferring credits to other educational institutions are also available by contacting the

educational institution that you are interested in attending. In this way, you can take the knowledge and the practical hands-on skills earned with your Sault College ECE diploma and add these to further educational experiences at the university level. Many employers are looking for individuals with a combination of practical and theoretical skills and the Diploma to Degree route gives you this advantage.

Further post-diploma certifications are also available such as the Communication Disorder Assistant, Autism and Behavioural Sciences, Infant-Toddler, School-age, ECE Administration and ECE Resource Consultant. Refer to the Ontario Colleges website at www.ontariocolleges.ca and do a keyword search for the post-graduate program that you are interested in.

As a graduate, you will also have the option of earning a three year Child & Youth Care (CYC) Diploma in only two academic years. This dual diploma option is available according to a predetermined educational map that provides you with one full year of advanced standing in the CYC program at Sault College.

# **OTHER INFORMATION**

College of Early Childhood Educators: www.college-ece.ca

For more information contact Program Coordinator Colleen Brady at 705.759.2554, ext 2572 or email colleen.brady@saultcollege.ca.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM110-3 College Communication Skills ED 124-3 Healthy Foundations in ECE ED 130-4 Teaching Methods I in ECE ED 134-2 Creative Expression ED 135-3 Introduction to Early Childhood Education PSY128-3 Intro to the Psychology of Early Learning ED 141-3 Introduction to Human Relations

# **SEMESTER 2**

ED 131-4 Teaching Methods II in ECE ED 132-3 Language and Literacy ED 136-9 Field Practice II ED 137-2 Integrated Seminar II HSC104-3 Child and Adolescent Development Part I

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **SEMESTER 3**

ED 223-4 Teaching Methods III ED 270-3 School Age Child Care and Programming ED 274-3 Children with Special Needs in Inclusive Settings ED 286-9 Field Practice III ED 287-2 Integrated Seminar III GEN100-3 Global Citizenship

#### **SEMESTER 4**

CMM225-3 Human Services Communication ED 213-3 Infant Toddler Care ED 247-4 Teaching Methods IV in ECE ED 285-3 Building Partnerships in Early Childhood Settings ED 288-3 Quality Assurance in Early Childhood Settings ED 289-12 Field Practice IV ED 290-2 Integrated Seminar IV

# **Course Descriptions**

#### Semester 1

#### College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Healthy Foundations in ECE (ED 124) (3 credits)

This course involves the study of health, safety, and nutrition in relation to the needs of young children. Occupational Health related to the work of the ECE will also be explored. Also to be studied are the professional roles related to child abuse and domestic violence issues with a focus on reporting procedures and working with families.

#### Teaching Methods I in ECE (ED 130) (4 credits)

This course introduces the student to both theoretical and practical techniques of creating a positive learning environment for the young child. A collaborative approach of educating children in a variety of settings which utilize developmentally appropriate practices is emphasized.

#### Creative Expression (ED 134) (2 credits)

This course helps students to see the beginnings of poetry, music and dance as children respond to the world around them. As a teacher-directed activity with a group of children, students learn how to nurture chant, song and dance as they happen spontaneously throughout the day. This course is designed to help teachers develop a creative approach to music and to learn skills which will help them encourage each child to discover new ways of expressing her/himself through music, movement, and language.

#### Introduction to Early Childhood Education (ED 135) (3 credits)

Through experiential learning and discussion, students will gain a general understanding about the Early Childhood Education field. The roles and responsibilities needed to work with young children will be examined. Students will be introduced to the professional standards and practices that are required for working in a variety of early learning settings.

#### Intro to the Psychology of Early Learning (PSY128) (3 credits)

A study of the science of psychology as it relates to early learning perspectives and best practice: including the topic areas of, 1) psychology as a discipline; 2) historical early learning philosophies; 3) non-Western early learning perspectives; 4) modern early learning perspectives. Psychological learning theories and concepts will be studied with the intent that students recognize how these theories are integrated into early learning methods and best practices. Students will have the opportunity to compare and contrast different perspectives on early learning, as well as recognize a variety of theoretical approaches to early

learning.

#### Introduction to Human Relations (ED 141) (3 credits)

This course will introduce students to principles and practices of effective interpersonal communication. Students will explore the theories and concepts related to interpersonal communication such as listening, verbal/non verbal messages, and conflict resolution. Learning opportunities throughout the course will emphasize how these concepts relate to everyday interactions.

#### Semester 2

#### Teaching Methods II in ECE (ED 131) (4 credits)

This course is a continuation of Teaching Methods I. It expands on the role of the teacher as mediator between the child and the learning environment. The student will explore the teacher's role in facilitating children's learning and in meeting their developmental needs through positive teaching behaviours and facilitative techniques. Developmental theories will be applied to program areas

#### Language and Literacy (ED 132) (3 credits)

This course will involve examining the research which identifies how critical the early years of a child's life are for developing literacy skills. Students will develop an understanding of the inter-relatedness of oral language, reading and writing and develop teaching strategies to help facilitate this growth. This will include exploring the components of setting up an effective literacy environment and how to facilitate quality early literacy experience.

#### Field Practice II (ED 136) (9 credits)

Through this course the teacher-in-training will develop skills in presenting developmentally appropriate activities to young children, on both an individual and a group basis. Students are scheduled for field practicum two days/week in community placement settings. These supervised field work hours assist the student in practicing observation and teaching skills.

#### Integrated Seminar II (ED 137) (2 credits)

Attendance at this weekly discussion seminar is required to assist the student in interpreting and following through on theories and methods of teaching and observing the young child. Emphasis is placed on confidentiality and on the development of professional and ethical behaviours crucial for working in the Early Childhood Education field. Assigned observations and placement activities will form a basis of discussion in this integrative seminar.

#### Child and Adolescent Development Part I (HSC104) (3 credits)

The growth and development of the person from conception to early childhood will be the focus of this course. Norms of development will be studied, addressing the interactive effects of maturation, experience and life context as they affect the individual.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 3

# Teaching Methods III (ED 223) (4 credits)

Building on concepts learned in Teaching Methods II, this course focuses on fostering childrens understanding of the world through inquiry-based learning. Students will gain teaching strategies to develop play environments and to guide child-initiated and adult-supported experiences that will enhance and deepen learning in indoor, outdoor and beyond spaces.

#### School Age Child Care and Programming (ED 270) (3 credits)

With the knowledge of child development and teaching methods as a foundation, the student will learn how to develop curriculum and establish programs aimed at meeting the particular needs of the school-aged child. Students will recognize the importance of a wide range of experiences and activities for children in this age group and will learn how to capitalize on their interests and abilities. Emphasis is placed on how to balance the freedom of choice within the context of group decision-making.

#### Children with Special Needs in Inclusive Settings (ED 274) (3 credits)

This course is designed to develop an understanding of various disabilities. Emphasis is place don the educator's role in planning for individual needs, while supporting the needs of the entire group in an inclusive environment. The focus is on using a team approach, with active family involvement to support the child with special needs in inclusive educational settings.

#### Field Practice III (ED 286) (9 credits)

Through experiential growth and the support of academic course work, the student is able to further solidify his/her philosophy of early childhood education, while incorporating this into improved teaching techniques. Students are expected to plan and carry out activities designed to extend children's play and learning opportunities and to exhibit developmentally appropriate and anti-biased practices. Added responsibility is placed on the student to lead group experiences as well.

#### Integrated Seminar III (ED 287) (2 credits)

This weekly seminar gives students the opportunity to share ideas and theoretical concerns relative to field practice. Teaching activities completed during field placement will form a basis for discussion. As a result, the student will be better prepared for planning and implementing activities for children's learning, and as well, for guiding behaviour.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 4

#### Human Services Communication (CMM225) (3 credits)

This course prepares students for employment in the human service professions. Emphasis is placed on career exploration and the production of a variety of written and oral communications suited for the various purposes and audiences relevant to this profession. In this course, the principles of writing are taught through the writing process.

# Infant Toddler Care (ED 213) (3 credits)

This course provides an introduction to the area of infant and toddle care. The young child's developmental changes during the infant and the toddler periods are significant. Infants and toddlers are seen as individuals with strengths and needs which are to be interpreted and responded to by the sensitive caregiver. The synchronicity of this relationship is emphasized. Consequently, the student will develop an appreciation of the importance of ensuring quality care giving and of the need for a good learning environment in both the home and group care settings.

# Teaching Methods IV in ECE (ED 247) (4 credits)

This course builds on concepts learned in Teaching Methods III. It will involve examining various aspects of curriculum planning and evaluation, both for groups and individuals, which will lead into actual practical application.

#### Building Partnerships in Early Childhood Settings (ED 285) (3 credits)

Developing partnerships with families is an integral part of the 'family-centred' approach in early childhood education. This course studies various aspects of this developmentally appropriate practice by examining specific strategies for building effective partnerships such as: positive communication practices, supporting family involvement, and exploring ways to respond to the changing face of Canadian families. The increasing role of the educator within the community will also be examined especially in the area of facilitating parent workshops.

#### Quality Assurance in Early Childhood Settings (ED 288) (3 credits)

An examination of current issues, social and governmental policies, advocacy, professional standards and the administrator's role will provide students with an understanding of the importance of quality in Early Childhood settings. Throughout this exploration, students will be challenged to develop their own philosophy of early childhood education by gaining an insight into the relationship between quality and the evolution of early childhood education.

#### Field Practice IV (ED 289) (12 credits)

This final segment of field practicum encourages the student to develop further strategies for enhancing the young child's developmental abilities based on presenting individual and group experiences. Additional responsibilities provide the student with the opportunity to refine and demonstrate the competencies required of a skilled teacher of young children. A minimum of 600 field practice hours is required for graduation. In field practice, the philosophy/goals and outcomes are reflected in the 'Progress Review Form' for Semester IV. These are consistent with Provincial standard outcomes expected of an entry-level Early Childhood Educator who graduates from an Ontario Community College.

#### Integrated Seminar IV (ED 290) (2 credits)

This weekly seminar gives students the opportunity to share ideas and theoretical concerns relative to field practice. Activities completed during field placement will form a basis for discussion. As a result, the student will be better prepared for planning for children's learning and for guiding children's behaviour.

# Early Childhood Education - (Full Time - Contact North)

Section B.32 6/2/2020

Ontario College Diploma (2 Years - 4 Semesters ) (1330) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

The Early Childhood Education Program is designed to prepare you for a position in the Early Childhood Education/Early Years field. You will have the knowledge and practical skills needed to plan and implement developmentally appropriate programs for children birth through 12 years of age. You will also be skilled in working with families and providing family educational programming. Our well-known and highly regarded program is one of the only in Ontario delivering training in Learning Language and Loving It - The Hanen Program for Early Childhood Educators/Teachers. The Learning Language and Loving It program is a research based, developmental approach to promote children's social, language and literacy development. Students also gain unique hands-on experience in our onsite child development centre giving you an edge when seeking employment. With an ECE diploma, you will be eligible to register with the College of Early Childhood Educators (CECE) and use the title of Registered Early Childhood Educator (RECE)

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

# A graduate of the Early Childhood Education Program at Sault College will reliably demonstrate the ability to:

1. Create learning contexts to enable, build and maintain caring, responsive relationships in partnerships with children, families and communities that value and respect social, cultural and linguistic diversity including Indigenous peoples` worldviews and Francophone identity.

2. Co-create, facilitate and reflect upon inquiry and play-based early years and child care programs and pedagogical approaches to support children's learning, holistic development and well-being following children's capabilities, interests, ideas and experiences.

3. Co-design and maintain inclusive early learning environments to value and support equitable, accessible and meaningful learning opportunities for all children, their families and communities in a range of early years and child care settings.

4. Collaborate with children, families, colleagues, agencies and community partners to create, maintain, evaluate and promote safe and healthy early learning environments to support independence, reasonable risk-taking and healthy development and well-being.

5. Use observation strategies to identify children's strengths and challenges and to ascertain when children and families might benefit from additional support or community resources.

6. Use professional communication in interactions with children, families, colleagues, employers, the regulatory body, government authorities and children's service agencies to meet legal and ethical standards of the early years sector.

7. Act in accordance with relevant legislation, regulations, College of Early Childhood Educators Code of Ethics and Standards of Practice, agency policies and procedures and principles of evidence-informed practice and reflect upon their impact on one's own role in early years and child care settings.

8. Identify, report and document when a child is in a situation of perceived risk for, or actual neglect or abuse, in accordance with legislation, the College of Early Childhood Educators Code of Ethics and Standards of Practice, policies and procedures.

9. Create and engage in partnerships with families, communities, colleagues, inter-disciplinary professionals, authorities and child service agencies to advocate for quality early years and child care programs and services.

10. Engage in reflective practice and continuous professional learning in accordance with principles of lifelong learning, evidence-informed practices in the early years sector and requirements of the College of Early Childhood Educators.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status.

#### ACADEMIC RECOMMENDATIONS

In order to gain insight into the profession, we suggest that you visit an early learning program in your community. Early Childhood Educators are working daily with children and families. It is a profession that is very physically and emotionally demanding. You will be involved in lifting children, materials and equipment. You need to be able to respond quickly and calmly within the indoor and outdoor environments to ensure children's on-going emotional and physical well-being. Your composed and realistic approach will be helpful in your interactions with families and community professionals.

# **CAREER PATHS**

As a graduate and upon registration with the College of ECE, you may refer to yourself as an Early Childhood Educator and work in a variety of settings.

These include but are not limited to:

- Half day and full day licensed infant, toddler, preschool and after- school programs
- Ministry of Education Full Day Early Learning Kindergarten programs
- Parent resource centre programs
- Inclusive settings with children with disabilities/special needs.

Other employment options that you may wish to pursue are as:

- An educational assistant or literacy educator for the school board
- Other roles in the community working with children and families

You are also encouraged to seek certification through your professional organization - the Association of Early Childhood Educators, Ontario (AECEO). For more information and membership requirements, contact the AECEO.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,972.30	\$1,128.00	N/A	N/A

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **CLINICAL/LAB OR FIELD PLACEMENTS**

You will be required to submit documentation of having completed the following procedures prior to entering your field placement. If the appropriate documentation is not received at least two weeks prior to the start of the field placement, it may be necessary to withdraw from the course.

A current (within six months) Police Records Search is required, since you will be enrolled in a program where you will have access to vulnerable people. For detailed information regarding the specifics and process, please refer to the `Police Records Search Procedure`. You are responsible for all costs associated with these requirements.

#### Immunization and Health Record Form:

This form includes the following immunization requirements:

Immunity against measles, mumps and rubella

- Current tetanus-diphtheria
- You will also be required to sign a Statement of Confidentiality Form.
- CPR (Level C), WHMIS, and First Aid Certificates are required. You must provide copies of your certification prior to starting your field placement.

Over your time in the ECE Program at Sault College, you will experience a variety of placements with children of differing age groups. These placement agencies are diverse and provide different opportunities to learn new skills in preparation for your professional career. You will work closely with Registered Early Childhood Educators and other professionals in community services, so that you learn the breadth of the profession and the services available to children and families in the community.

Some examples of some of the placements that you may experience are:

- Licenced infant, toddler, preschool or after-school programs
- Full Day Early Learning Kindergarten programs
- Best Start Hub programs
- Children's Rehabilitation Centre
- Infant Child Development Program
- Waabinong Aboriginal Head Start program

# **EDUCATIONAL PATHS**

Opportunities for transferring credits to other educational institutions are also available by contacting the

educational institution that you are interested in attending. In this way, you can take the knowledge and the practical hands-on skills earned with your Sault College ECE diploma and add these to further educational experiences at the university level. Many employers are looking for individuals with a combination of practical and theoretical skills and the Diploma to Degree route gives you this advantage.

Further post-diploma certifications are also available such as the Communication Disorder Assistant, Autism and Behavioural Sciences, Infant-Toddler, School-age, ECE Administration and ECE Resource Consultant. Refer to the Ontario Colleges website at www.ontariocolleges.ca and do a keyword search for the post-graduate program that you are interested in.

As a graduate, you will also have the option of earning a three year Child & Youth Care (CYC) Diploma in only two academic years. This dual diploma option is available according to a predetermined educational map that provides you with one full year of advanced standing in the CYC program at Sault College.

# **OTHER INFORMATION**

This program is delivered off-campus through Contact North and is full-time. Students are to apply to this program via <u>ontariocolleges.ca</u>.

College of Early Childhood Educators: <u>www.college-ece.ca</u>.

For more information contact Carla Bumbaco, in our Continuing Education department at 705-759-2554 ext. 2658 or via email at carla.bumbaco@saultcollege.ca.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM110-3 College Communication Skills ED 124-3 Healthy Foundations in ECE ED 130-4 Teaching Methods I in ECE ED 134-2 Creative Expression ED 135-3 Introduction to Early Childhood Education ED 141-3 Introduction to Human Relations

#### **SEMESTER 2**

ED 131-4 Teaching Methods II in ECE ED 132-3 Language and Literacy ED 136-9 Field Practice II ED 137-2 Integrated Seminar II

#### **SEMESTER 3**

ED 223-4 Teaching Methods III ED 270-3 School Age Child Care and Programming ED 274-3 Children with Special Needs in Inclusive Settings ED 286-9 Field Practice III ED 287-2 Integrated Seminar III GEN100-3 Global Citizenship

#### **SEMESTER 4**

CMM225-3 Human Services Communication ED 213-3 Infant Toddler Care ED 247-4 Teaching Methods IV in ECE ED 285-3 Building Partnerships in Early Childhood Settings ED 288-3 Quality Assurance in Early Childhood Settings ED 289-12 Field Practice IV ED 290-2 Integrated Seminar IV

# **Course Descriptions**

#### Semester 1

#### College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

# Healthy Foundations in ECE (ED 124) (3 credits)

This course involves the study of health, safety, and nutrition in relation to the needs of young children. Occupational Health related to the work of the ECE will also be explored. Also to be studied are the professional roles related to child abuse and domestic violence issues with a focus on reporting procedures and working with families.

#### Teaching Methods I in ECE (ED 130) (4 credits)

This course introduces the student to both theoretical and practical techniques of creating a positive learning environment for the young child. A collaborative approach of educating children in a variety of settings which utilize developmentally appropriate practices is emphasized.

#### Creative Expression (ED 134) (2 credits)

This course helps students to see the beginnings of poetry, music and dance as children respond to the world around them. As a teacher-directed activity with a group of children, students learn how to nurture chant, song and dance as they happen spontaneously throughout the day. This course is designed to help teachers develop a creative approach to music and to learn skills which will help them encourage each child to discover new ways of expressing her/himself through music, movement, and language.

#### Introduction to Early Childhood Education (ED 135) (3 credits)

Through experiential learning and discussion, students will gain a general understanding about the Early Childhood Education field. The roles and responsibilities needed to work with young children will be examined. Students will be introduced to the professional standards and practices that are required for working in a variety of early learning settings.

#### Introduction to Human Relations (ED 141) (3 credits)

This course will introduce students to principles and practices of effective interpersonal communication. Students will explore the theories and concepts related to interpersonal communication such as listening, verbal/non verbal messages, and conflict resolution. Learning opportunities throughout the course will emphasize how these concepts relate to everyday interactions.

#### Semester 2

# Teaching Methods II in ECE (ED 131) (4 credits)

This course is a continuation of Teaching Methods I. It expands on the role of the teacher as mediator between the child and the learning environment. The student will explore the teacher's role in facilitating children's learning and in meeting their developmental needs through positive teaching behaviours and

#### facilitative techniques. Developmental theories will be applied to program areas

#### Language and Literacy (ED 132) (3 credits)

This course will involve examining the research which identifies how critical the early years of a child's life are for developing literacy skills. Students will develop an understanding of the inter-relatedness of oral language, reading and writing and develop teaching strategies to help facilitate this growth. This will include exploring the components of setting up an effective literacy environment and how to facilitate quality early literacy experience.

#### Field Practice II (ED 136) (9 credits)

Through this course the teacher-in-training will develop skills in presenting developmentally appropriate activities to young children, on both an individual and a group basis. Students are scheduled for field practicum two days/week in community placement settings. These supervised field work hours assist the student in practicing observation and teaching skills.

#### Integrated Seminar II (ED 137) (2 credits)

Attendance at this weekly discussion seminar is required to assist the student in interpreting and following through on theories and methods of teaching and observing the young child. Emphasis is placed on confidentiality and on the development of professional and ethical behaviours crucial for working in the Early Childhood Education field. Assigned observations and placement activities will form a basis of discussion in this integrative seminar.

#### Semester 3

#### Teaching Methods III (ED 223) (4 credits)

Building on concepts learned in Teaching Methods II, this course focuses on fostering childrens understanding of the world through inquiry-based learning. Students will gain teaching strategies to develop play environments and to guide child-initiated and adult-supported experiences that will enhance and deepen learning in indoor, outdoor and beyond spaces.

#### School Age Child Care and Programming (ED 270) (3 credits)

With the knowledge of child development and teaching methods as a foundation, the student will learn how to develop curriculum and establish programs aimed at meeting the particular needs of the school-aged child. Students will recognize the importance of a wide range of experiences and activities for children in this age group and will learn how to capitalize on their interests and abilities. Emphasis is placed on how to balance the freedom of choice within the context of group decision-making.

#### Children with Special Needs in Inclusive Settings (ED 274) (3 credits)

This course is designed to develop an understanding of various disabilities. Emphasis is place don the educator's role in planning for individual needs, while supporting the needs of the entire group in an inclusive environment. The focus is on using a team approach, with active family involvement to support the child with special needs in inclusive educational settings.

#### Field Practice III (ED 286) (9 credits)

Through experiential growth and the support of academic course work, the student is able to further solidify his/her philosophy of early childhood education, while incorporating this into improved teaching techniques. Students are expected to plan and carry out activities designed to extend children's play and learning opportunities and to exhibit developmentally appropriate and anti-biased practices. Added responsibility is placed on the student to lead group experiences as well.

#### Integrated Seminar III (ED 287) (2 credits)

This weekly seminar gives students the opportunity to share ideas and theoretical concerns relative to field practice. Teaching activities completed during field placement will form a basis for discussion. As a result, the student will be better prepared for planning and implementing activities for children's learning, and as

#### well, for guiding behaviour.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 4

#### Human Services Communication (CMM225) (3 credits)

This course prepares students for employment in the human service professions. Emphasis is placed on career exploration and the production of a variety of written and oral communications suited for the various purposes and audiences relevant to this profession. In this course, the principles of writing are taught through the writing process.

#### Infant Toddler Care (ED 213) (3 credits)

This course provides an introduction to the area of infant and toddle care. The young child's developmental changes during the infant and the toddler periods are significant. Infants and toddlers are seen as individuals with strengths and needs which are to be interpreted and responded to by the sensitive caregiver. The synchronicity of this relationship is emphasized. Consequently, the student will develop an appreciation of the importance of ensuring quality care giving and of the need for a good learning environment in both the home and group care settings.

#### Teaching Methods IV in ECE (ED 247) (4 credits)

This course builds on concepts learned in Teaching Methods III. It will involve examining various aspects of curriculum planning and evaluation, both for groups and individuals, which will lead into actual practical application.

#### Building Partnerships in Early Childhood Settings (ED 285) (3 credits)

Developing partnerships with families is an integral part of the 'family-centred' approach in early childhood education. This course studies various aspects of this developmentally appropriate practice by examining specific strategies for building effective partnerships such as: positive communication practices, supporting family involvement, and exploring ways to respond to the changing face of Canadian families. The increasing role of the educator within the community will also be examined especially in the area of facilitating parent workshops.

#### Quality Assurance in Early Childhood Settings (ED 288) (3 credits)

An examination of current issues, social and governmental policies, advocacy, professional standards and the administrator's role will provide students with an understanding of the importance of quality in Early Childhood settings. Throughout this exploration, students will be challenged to develop their own philosophy of early childhood education by gaining an insight into the relationship between quality and the evolution of early childhood education.

## Field Practice IV (ED 289) (12 credits)

This final segment of field practicum encourages the student to develop further strategies for enhancing the young child's developmental abilities based on presenting individual and group experiences. Additional responsibilities provide the student with the opportunity to refine and demonstrate the competencies required of a skilled teacher of young children. A minimum of 600 field practice hours is required for graduation. In field practice, the philosophy/goals and outcomes are reflected in the 'Progress Review Form' for Semester IV. These are consistent with Provincial standard outcomes expected of an entry-level Early Childhood Educator who graduates from an Ontario Community College.

## Integrated Seminar IV (ED 290) (2 credits)

This weekly seminar gives students the opportunity to share ideas and theoretical concerns relative to field practice. Activities completed during field placement will form a basis for discussion. As a result, the student will be better prepared for planning for children's learning and for guiding children's behaviour.

## Social Service Worker

**Ontario College Diploma (2 Years - 4 Semesters ) (1203)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

Are you interested in being part of a profession that works to improve the lives of individuals, families, groups and communities? Are you ready to learn through classroom and hands-on field placement experiences? Join us in the Social Service Worker program to develop your knowledge and skills to assume the challenging and rewarding role of a helping professional.

The core skills that you will learn in the program involve taking strengths-based, ethical, problem solving approaches that promote social justice and social well-being. You will develop strong interpersonal, group and community capacity building skills that will enable you to provide support to individuals, groups, families and communities. You will gain an understanding from a social work perspective of the needs and strengths of diverse populations, and barriers to meeting these needs. You will learn theories that are based on an anti-oppressive approach to social work, and that involved empowerment and systems based approaches. You will expand and deepen your understanding of the multiple factors involved in both creating and addressing social inequities. Throughout the second year of the program you will experience approximately 500 hours of agency field placement which provides the opportunity to apply classroom learning within a community based organization.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

#### A graduate of the Social Service Worker Program at Sault College will reliably demonstrate the ability to:

1. develop respectful and collaborative professional and interpersonal relationships that adhere to professional, legal, and ethical standards aligned to social service work.

2. record information accurately and communicate effectively in written, digital, verbal and non-verbal ways, in adherence to privacy and freedom of information legislation, in accordance with professional and workplace standards.

3. integrate a practice framework within a service delivery continuum, addressing the needs of individuals, families and communities at micro, mezzo, macro and global levels, and work with them in achieving their goals.

4. plan and implement accessible and responsive programs and services, recognizing the diverse needs and experiences of individuals, groups, families and communities, and meeting these needs.

5. examine current social policy, relevant legislation, and political, social, historical, and/or economic systems and their impacts for individuals and communities when delivering services to the user/client.

6. develop strategies and approaches that support individual clients, groups, families and communities in building the capacity for self-advocacy, while affirming their dignity and self-worth.

7. work from an anti-oppressive, strengths-based practice, recognizing the capacity for resilience and

growth of individuals and communities when responding to the diverse needs of marginalized or vulnerable populations to act as allies and advocates.

8. develop strategies and approaches to implement and maintain holistic self-care as a member of a human service profession.

9. work with individuals, groups, families and their communities to ensure that service provider strategies promote social and economic justice, and challenge patterns of oppression, discrimination and harassment, and sexual violence with clients, coworkers and communities.

10. develop the capacity to work with the Indigenous individual, families, groups and communities while respecting their inherent rights to self-determine, and to identify and address systemic barriers that produce ill-effects, developing appropriate responses using approaches such as trauma informed care practice.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status. You are encouraged to look at the High School Program Pathway Chart available online in the Program Overview for recommended courses that will help you be more prepared for the SSW program.

#### ACADEMIC RECOMMENDATIONS

Social Service Work is a challenging profession that requires the ability to relate to others in a respectful and non-judgmental manner. Your success in the program will be promoted by professional communication skills (verbal and written), and a belief in social justice and social change. Given your work with diverse and vulnerable people, you will be best suited for the profession if you are emotionally and socially skilled and prepared to develop meaningful relationships with others. The ability to work both independently and within a team environment is critical. We suggest that you visit or meet with a Social Service Worker to learn more about the profession.

## **CAREER PATHS**

Within the province of Ontario, Social Service Work is a regulated profession. Upon your successful graduation from the program, you will receive a Social Service Worker diploma, and be eligible for registration with the Ontario College of Social Workers and Social Service Workers (OCSWSSW). Social Service Workers are employed in community-based organizations, social service agencies, educational, health and corrections settings. Past graduates have been employed with developmental services, educational settings, social services, income security programs, mental health, addictions and concurrent disorder programs, long term care facilities, and others. SSW graduates are well prepared to apply the generic Social Service Work skills learned to the job market, responding to the unique mandate of each organization. For further information on the profession and potential employment opportunities, visit the OCSWSSW website at www.ocswssw.org.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **CLINICAL/LAB OR FIELD PLACEMENTS**

There is a field placement component to the program during the second year of the program which involves 14 hours per week in the third, fall semester and 21 hours per week in the fourth, winter semester.

All applicants will be required to submit documentation of completion of the placement eligibility procedures prior to entering field placement. If the appropriate documentation is not received by the SSW program deadline in the second semester, you may not be registered in the fieldwork component. To be eligible for fieldwork and in accordance with SSW community partners that facilitate the learning opportunities, all students must complete the following (all costs associated with these requirements are the responsibility of the student):

(I) A current Police Records Search. This is required by students as they will be enrolled in a program during which they may have unsupervised access to vulnerable persons. For detailed information regarding the specifics and process, please refer to the link titled Criminal Records Check/Placement requirements.

(II) Immunization & Health Record Form: This form includes the following immunization requirements:

a)Two-step TB test Immunity against measles, mumps, and rubella. b) Current tetanus-diphtheria.

We strongly recommend that students, for their own personal safety, have the Hepatitis B vaccine prior to entering into the program. Students are also encouraged to have a current influenza immunization as this may be a requirement of some fieldwork settings.

(III) Current Certification in CPR (Level C) and First Aid

(IV) Completion of the Workplace Hazardous Materials Information System (WHMIS)(IV) The student must also sign a SSW Program Statement of Confidentiality Form prior to field placement.

## **EDUCATIONAL PATHS**

Social Service Worker graduates can pursue further education through a variety of pathways. University education can be pursued at Algoma University and other select Ontario universities through established articulation agreements. Graduates have pursued degrees in Social Work, Psychology, Sociology, Community Development, and other areas. For further information on the options, visit the Algoma University website at www.algomau.ca.

There are also developed pathways with Queensland, Australia, leading to Bachelor of Social Work or Human Services degrees. For further information, <u>click here</u>.

University of Windsor also offers a block transfer with an overall B average into their Honours BA in Disability Studies program. For further information, see the University of Windsor website, or contact Shelagh Towson at towson@uwindsor.ca.

SSW graduates can also earn a three year Child and Youth Care diploma in only two years. This dual diploma option is available using a predetermined educational map that provides you with advanced standing. For further information, contact the CYC or SSW coordinators and refer to the laddering options section.

## **OTHER INFORMATION**

For more information contact Program Coordinator?Leanne Murray?at 705.759.2554, ext 2567 or email leanne.murray@saultcollege.ca

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM110-3 College Communication Skills SSC102-3 Introduction to Aboriginal Peoples of Canada SSW101-3 Introduction to SSW Helping Skills SSW102-3 Introduction to Concurrent Disorders SSW125-3 Introduction to Social Service Work Theory and Practice SSW126-3 Introduction to Trauma Informed Care GEN100-3 Global Citizenship

#### **SEMESTER 2**

CMM235-3 S.S.W. Documentation and Record Keeping SSW207-3 SSW Community Resources & Fieldwork Preparation SSW212-3 SSW Group Practice Skills SSW221-3 Ethics and Professionalism SSW226-1 Non - Violent Crisis Intervention SSW227-3 SSW Essential Practice Skills PSY120-3 Lifespan Development

#### Select one of the following:

GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 3**

SSW301-2 Seminar for Social Service Work SSW303-3 Social Service Work Practice with Families SSW305-3 Social Welfare: Policy and Practice w/ Indigenous and O.P. SSW306-3 Human Behaviour and Social Environment SSW307-

#### **SEMESTER 4**

SSW401-2 Seminar II for Social Service Work SSW403-3 Trauma Informed Crisis Intervention SSW404-4 S.S.W. Essential Advocacy/Community Capacity Building Skills SSW405-

## **Course Descriptions**

Semester 1

#### College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Introduction to Aboriginal Peoples of Canada (SSC102) (3 credits)

This course will provide participants with an introduction to the history and cultural survival of Canada's Aboriginal people. Aboriginal worldview will be identified and discussed in both historical and modern perspectives. Students will review colonization, government policies and legislation, which provide a foundation for understanding modern Aboriginal life in Canada.

#### Introduction to SSW Helping Skills (SSW101) (3 credits)

Essential to Social Service Work practice is the ability to develop collaborative helping relationships with others. This course is designed to introduce students to effective interpersonal communication and interviewing skills that promote the helping process. Students can expect a strong emphasis in reflective practice (self-awareness), integration of theory and application of concepts to promote personal and professional skill development.

#### Introduction to Concurrent Disorders (SSW102) (3 credits)

This course will provide introductory knowledge to assist students to better understand concurrent disorders and their impact on individuals, families and communities. Students will become familiar with signs and symptoms of common mental illnesses along with common substance abuse patterns. Students will also gain knowledge of mental health and the concept of resilience, strength, risk and protective factors related to concurrent disorders.

#### Introduction to Social Service Work Theory and Practice (SSW125) (3 credits)

This course introduces students to social work theories that influence the practice of social service work. Students will be introduced to the roles and scope of practice of a social service worker, the profession of social work, and the theories that inform social service worker practice. Attention is given to anti-oppressive and empowerment perspectives with an emphasis on structural, feminist, indigenous, ecological and strengths-based theories. This theoretical foundation enables students to make the links between structural analysis and social service work practice and identify various forms of oppression, discrimination, and power and privilege. Students can expect to develop anti-oppressive practice stance that is consistent with professional values, ethics and standards of practice.

## Introduction to Trauma Informed Care (SSW126) (3 credits)

Social Service Work practice involves working with marginalized individuals, families, groups and communities on micro, mezzo and macro levels in a range of roles and within a variety of organizational and community contexts. The experience of trauma is not uncommon in the lives of those that SSW?s support, and in the communities that SSW?s strive to support and create positive change within. This course is introductory and will introduce the description and scope of trauma and its impact on individuals, families and communities. Subsequent courses will build on the foundational knowledge.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social

injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

### Semester 2

## S.S.W. Documentation and Record Keeping (CMM235) (3 credits)

Record keeping is essential to social service work practice, and reflects professional values and legal and ethical obligations. Documentation supports professional observations, assessment and intervention strategies, and promotes integrated care and delivery of services that address client goals. In this course, students critically approach client interactions and produce documentation that is objective, culturally safe, and client centred. Emphasis is placed on research and applied writing skills reflective of the SSW profession, workplace practices, and legal frameworks relevant to Ontario. Through documentation, students further develop their professional skills and competence in strengths-based, anti-oppressive practice.

#### SSW Community Resources & Fieldwork Preparation (SSW207) (3 credits)

This course will provide current and comprehensive knowledge of the broad range of community resources accessed by the individuals, families and communities that Social Service Workers support. Students will also become prepared for field placement provided in second year.

#### SSW Group Practice Skills (SSW212) (3 credits)

Group work is an essential practice modality of social service work. Students will integrate and apply theoretical and practice models of group work required for professional practice. The course will emphasis experiential learning and skill development in group facilitation, leadership and ability to prepare, plan and implement appropriate group interventions that respect client needs, strengths and goals.

#### Ethics and Professionalism (SSW221) (3 credits)

This course introduces students to the ethical standards of the Social Service Work profession. Applications to case situations will be highlighted. As well, the course will focus on the formation and maintenance of professional relationships, with colleagues and supervisors.

#### Non - Violent Crisis Intervention (SSW226) (1 credits)

#### SSW Essential Practice Skills (SSW227) (3 credits)

Students will explore divergent approaches to case management with a particular emphasis on strengths-based, empowerment, trauma informed and anti-oppressive perspectives. Through practical case studies, practice demonstrations/case simulations students will demonstrate SSW skills in the roles and responsibilities assumed by case managers including intake, engagement, assessment, intervention & goal planning, documentation, service coordination and advocacy. Students will develop collaborative skills to mutually identify strengths, resiliency, resources, goals and challenges of clients within a variety of practice settings including addiction and mental health. Students can expect a strong emphasis in reflective practice, self-awareness and application of case management concepts.

#### Lifespan Development (PSY120) (3 credits)

The purpose of this lifespan development course is to examine the interrelationship of the biopsychosocial aspects of ages and stages from birth to late adulthood. Developmental psychology is the study of the processes that shape human development. The goals of studying life span development are description, explanation and optimization of human development throughout a persons entire life. Students will study the interaction between cultural, social and historical impacts and biological maturation to gain a holistic understanding of human development. In addition, to studying human development in a systematic way, students will gain a personal understanding of their own lives in the context of lifespan development.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 3

#### Seminar for Social Service Work (SSW301) (2 credits)

This course is designed as a co-requisite to Fieldwork and is intended to support student learning and professional growth within their placement setting. The course is designed to assist the students development of professional self and understanding the role of SSW within the human services field. Examination of social work micro, mezzo and macro level skills are promoted through active participation and group discussion. Evidence of integration social service knowledge and skills are expected.

#### Social Service Work Practice with Families (SSW303) (3 credits)

Currently and historically, the social work profession has been instrumental in providing support and interventions to families in need. This course will provide students the necessary knowledge and skills to assess and intervene with diverse families in the community. Specifically, the course will promote students` ability to foster family resilience through a variety of best practice interventions.

#### Social Welfare: Policy and Practice w/ Indigenous and O.P. (SSW305) (3 credits)

This course examines major concepts, roots, and social, cultural, political and economic trends shaping social policy, social welfare and practice with an emphasis on Indigenous people and other racialized groups in Canada.?Students will understand the historical, collective and intergenerational impact of trauma; colonization and assimilation policies have had on Indigenous peoples. Additionally, an examination of relevant social policies and programs relevant to other oppressed groups is emphasized. Using cultural safe practices, students will learn to identify community resources and needs to engage with diverse communities in ways which respect and support their worldviews, values and rights to self -determine.?Students will be exposed to Indigenous and other alternative practice models to incorporate within their SSW practice. The roles of ?elder?, ?knowledge holders?, ?helpers? and ?allies? will be explored.

#### Human Behaviour and Social Environment (SSW306) (3 credits)

This course is designed to provide knowledge and understanding of theory and practice issues related to human behavior as a bio-psycho-social-spiritual phenomenon. From an anti-oppressive perspective, the promotion of social and economic justice are examined in relation to the interaction of societal, biological, political, economic, historical, cultural and psychosocial variables. The impacts of racial, gender, orientation, age, and socio-cultural influences across individual, family, and community lifespans are developed. Through the lens of anti-oppressive perspectives, particular practice implications and skills with Indigenous populations, older adults, LGBTTQ-I community and individuals with who are neuro-diverse or have disabilities are emphasized.

#### (SSW307) (credits)

#### Semester 4

#### Seminar II for Social Service Work (SSW401) (2 credits)

This course is designed as a co-requisite to Fieldwork and provides students with the opportunity to further develop graduating level SSW vocational and employability skills required for the community service field. Students are expected to actively engage in the course demonstrating the core competencies of the profession.

#### Trauma Informed Crisis Intervention (SSW403) (3 credits)

The course is designed for Social Service Worker Students to increase knowledge and skills for crisis

intervention practice with individuals, families, groups and communities. Students will study evidence-based applications of theory to practice with identified at-risk populations. Recent research supports a resiliency based approach to promote crisis resolution particularly in a multi-cultural society. Application, analyses and discussion will center on crisis intervention as it applies to social work practice.

## S.S.W. Essential Advocacy/Community Capacity Building Skills (SSW404) (4 credits)

This course focuses on the skills, knowledge and perspectives required to work effectively in communities and in social service practice areas requiring advocacy skills. Knowledge of what constitutes a healthy community, engagement of citizens to determine and realize community goals, social determinants of health and their relationship to engaged citizenship and social justice and optimizing community strengths will be emphasized. Students will become more familiar with definitions of community, methods of community engagement, and social justice as it applies to communities.

(SSW405) ( credits)

## Addictions and Mental Health Studies

Section B.34 6/2/2020



## SAULT COLLEC

## **PROGRAM OVERVIEW**

This online certificate is designed for professionals working in healthcare, education, or social and community services fields who are currently working with, or would like to work with, populations affected by addictions and mental illness.

The program may also be of interest to individuals who want to broaden their understanding of addictions and mental health for personal reasons. This program will explore the complexities of mental illness, the link to addictions, and the needs of a diverse population. Learners will gain the relevant knowledge and practical skills needed to effectively work with populations who may have mental health and addictions issues.

## Learners must complete five compulsory courses listed below

Human Development

Mental Health and Society

Addictions and Mental Health

Drug Knowledge: Addictions and Behaviour Changes

A Culture of Addictions

## Learners must complete two elective courses of their choosing from the list below

Chemical Dependency and Substance Use and Abuse

Understanding Offenders with Mental Health Issues

Victim Assistance Services

Motivational Interviewing and Change Theory Practice

Family Counseling in Addictions

Group Counseling for Addictions and Mental Health Practitioners

## **PROGRAM OUTCOMES**

Graduates of this program will be able to:

1. Describe the fundamental theories and premises associated with approaches to explaining human development.

2. Identify the contributing factors that influence addictions and mental health issues.

3.Differentiate between mental health, mental illness, and mental disorders.

4. Identify the contributing factors that influence addictions and mental health issues.

5. Identify the signs and symptoms exhibited by persons dealing with various addictions or mental health issues.

6.Identify addiction issues in relation to specific target populations.

7. Distinguish between substance use, substance misuse, and dependency.

8.Explain the pharmacological effects and behavioural manifestations of substance abuse.

9. Analyze the concepts of stigma, resilience, recovery and quality of life in order to determine how they shape socio-political perspectives related to mental health and wellness in Canada.

10.Discuss current and future strategies regarding mental illness and addiction and its potential influences on Canadian society.

11.List the various treatment options and community programs available for people facing issues related to addictions or mental health.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older

Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate

Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate

## **CAREER PATHS**

The program is directed to those who have related experience in the fields of mental health and addictions, which may include positions in community services (e.g. social workers, child and youth workers, police officers), education (e.g. educational support workers, educational assistants, teachers), and health (e.g. occupational therapist assistants, physiotherapist assistants, personal support workers, and nurses).

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca.</u>

## CERTIFICATIONS

Upon successful completion of the online Addictions and Mental Health Studies certificate program,

students will obtain a Sault College certificate.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1235-3 Addictions and Mental Health OEL1266-3 Mental Health and Society OEL1273-3 Human Development OEL1274-2 Drug Knowledge: Addictions and Behaviour OEL1275-3 A Culture of Addiction **Electives:** 

Learners must complete two electives of their choosing from the list below:

- OEL1276 Chemical Dependency and Substance Use and Abuse
- OEL1277 Understanding Offenders with Mental Health Issues
- OEL1278 Victim Assistance Services
- OEL1279 Motivational Interviewing and Change Theory Practice
- OEL1280 Family Counseling in Addictions
- OEL1281 Group Counseling for Addictions and Mental Health Practitioners

## **Course Descriptions**

#### Semester 1

#### Addictions and Mental Health (OEL1235) (3 credits)

Issues relating to addictions and mental health are highly prevalent in Canadian society. One in five Canadians will experience a mental illness in their lifetimes. The remaining four will have a friend, family member or colleague who will experience mental illness or addiction. One in ten Canadians aged fifteen years and older report symptoms consistent with alcohol or illicit drug dependence. About 20% of people with a mental disorder have a co-occurring substance use problem. As first responders, it is critical to possess knowledge, understanding and empathy about these topics. This course will address issues relating to the development of addictions, effects, signs and symptoms and response, as well as seeking to provide a greater understanding to the differences between mental health, mental illness and mental disorders. Finally, the course will familiarize students with concurrent disorders, a term used when a person has both a substance related disorder and a mental health disorder.

#### Mental Health and Society (OEL1266) (3 credits)

This course focuses on a multi-disciplinary examination of the ways in which mental health and addiction are viewed by society and how these perceptions influence society's response to the practical and socio-political aspects of mental illness. Students will examine personal attitudes, societal myths, and stereotypes related to mental illness and addiction. Students will be challenged to critically reflect upon how their personal orientations and resulting behaviours about mental illness, addiction, and wellness impact their cultural, societal and political beliefs.

Drawing on literature, arts, politics, media, medicine, and the social sciences, students will critically examine mental illness and addiction as a social construct and contrast and compare assumptions of agency, normalcy, treatment, and recovery. Students will also learn firsthand from those with mental illness, evaluate the effects of mental illness in special populations including Indigenous people and the elderly, and apply their learning through health simulation activities. Finally, students will explore ways that those affected by mental illness and addiction construct and assess themselves.

#### Human Development (OEL1273) (3 credits)

This course is designed to provide the student with some of the practical knowledge necessary for a career in Human Services. Students will gain a greater understanding of human development across the life span by exploring the physical, cognitive and socio-emotional stages of development. As well, students will be provided with a foundation in the theoretical perspectives of Piaget, Skinner, Maslow, Keene, Erickson and Kolhberg. Students will explore the relationship between theories of human development and approaches to addiction treatment.

#### Drug Knowledge: Addictions and Behaviour (OEL1274) (2 credits)

This course will introduce students to skills and techniques essential to helping clients change addiction related behaviours. This course will also assist students in guiding clients towards positive lifestyle changes. Based on the Transtheoretical Model of Change, this course will explore the stages of change and the factors and interventions that promote and prepare clients for change. This model is considered a key component in client treatment and counselling.

#### A Culture of Addiction (OEL1275) (3 credits)

As an introductory and interdisciplinary survey of the role of addiction in human cultures, this course is designed to expose students to how narcotic as well as non-narcotic-related addiction manifest themselves within various individual and institutional practices. In particular, students will explore the major biological, psychological and social/cultural theories applied to addiction. Focus is given to the nature of drug use, conceptions of `the addict,` how drugs impact the brain, the impact on family, and consequences for changing social drug behaviors. This course also explores current theoretical and practical treatment approaches and education and prevention strategies. Emphasis will be given to special issues and hot topics in drug addiction, including youth, women, media portrayal of drug use and current debates on the war on drugs. Finally, understanding common perspectives on treatment and prevention strategies related to drug dependence and education will be studied.

## Adult Educator

Certificate (Part-time Distance Education ) (1211) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## Section B.35 6/2/2020

## **PROGRAM OVERVIEW**

The Adult Educator certificate is designed to enhance the knowledge and skills of those engaged in delivering training to adults in the business, industry, service and education sectors.

Thisis a part-time program that is offered online via the internet, while the final course (ED 248) is offered via independent study and can be started at any time. Online courses begin every January, May and September. Some online courses begin each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C or mature student status.

#### ACADEMIC RECOMMENDATIONS

It is recommended that participants entering this program have at least three years work experience in business, industry or government.

## **CAREER PATHS**

Graduates of the program are qualified to train adults in a business, industry, service or education sectors of the community.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca.</u>

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

ED 248-3 Application of Teaching Techniques OEL191-3 Instructional Techniques OEL697-3 Curriculum Development OEL718-3 Adults with Learning Disabilities OEL719-3 Assessment and Evaluation OEL720-3 Adult Learning

## **Course Descriptions**

#### Semester 1

#### Application of Teaching Techniques (ED 248) (3 credits)

This course will allow participants to demonstrate teachings strategies and their own teaching skills. Evaluation will be a combination of instructor, peer and self-evaluation.

#### Instructional Techniques (OEL191) (3 credits)

In today's complex learning environment, the most successful instructors demonstrate instructional strategies that both respect and challenge adult learners. Through lectures, discussion (synchronous and asynchronous) and various assignments, participants will explore a wide variety of instructional techniques including: lecture, group discussion, demonstration, icebreakers, case study, brainstorming, debate, fishbowl, collage, role-play, panel discussions and skits. Participants will demonstrate their mastery of instructional techniques through the design and on-line delivery of a lesson. Instructional strategies or approaches to learning which include a variety of techniques will also be covered by reviewing some of the most common strategies including co-operative learning, problem-based learning and action learning. In addition to instructional techniques and strategies, classroom management issues and the use of media and resources will also be covered.

#### Curriculum Development (OEL697) (3 credits)

This course will provide participants the opportunity to acquire the skills and knowledge to develop a systematic approach to curriculum development based on a training/education model. Topics include needs assessment, learning outcomes, course outlines, lesson plans and an introduction to choosing instructional techniques and assessment and evaluation techniques.

Each participant will be responsible for developing a course outline and a lesson plan for content with which she/he has taught, is teaching, or would like to teach. Attention will be given to the integration of planning, learning styles, and to a lesser degree, instructional techniques and course assessment/evaluation methodologies.

#### Adults with Learning Disabilities (OEL718) (3 credits)

This course provides insight into the needs and issues of Adults with Learning Disabilities in the educational or training setting and society as a whole. You will gain general knowledge and awareness of the various exceptionalities with a primary focus on understanding adults with learning disabilities. Strategies and skills are explored so that educators/trainers can provide appropriate modifications and accommodations to course content, delivery and evaluation, to ensure that all learners have an opportunity to be successful.

#### Assessment and Evaluation (OEL719) (3 credits)

This course is designed to give learners an overview of the processes involved in assessment and evaluation. A variety of types of evaluation will be utilized in order to understand and meet the needs of learners and stakeholders. Learners will be encouraged to evaluate their own practice as a teacher or trainer in their environment.

#### Adult Learning (OEL720) (3 credits)

This course focuses on learning how to apply the principles of adult learning and to develop basic skills essential to successful instruction. This is specifically designed for teachers and trainers in all fields who present information to adults.

Airline Operations	Section B.36 6/2/2020	
Special Non-Post Secondary Certificate (75 hours - Part-time Distance Education ) (8130)		
705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada	COLLEGE	

## **PROGRAM OVERVIEW**

Airline Operations program will give you the basics of how an airline is operated and the specifics of an airline operations position. You will have a detailed understanding of aspects related to aircraft, a detailed knowledge of ramp attendant duties and a good overview of airline operations. This program is designed for those who wish to get into the airline industry and consolidates information for those already working for an airline who wish to advance in their chosen field.

You can start this program anytime. All program material is included in the program fee. You have one year to complete the program. Students in this program are not eligible for OSAP funding.

Fill out the <u>Registration Form</u> and email or drop-off to Sault College at the address stated on the form to begin learning.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School graduate or 19 years of age or over.

## **CAREER PATHS**

Graduates may seek employment as a Ground Handler, Baggage Handler, Customer Service Agent and an Airline Marketing Officer.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca</u>.

#### **PROGRAM OF STUDY**

SEMESTER 1 AOP012-3 Airline Safety and Security Note:

This course is made up the following modules:

- Airline History and Careers
- Airport/Airline Interface
- Air Carrier Security
- Dangerous Goods
- Ground Handling
- Aviation Fuelling
- Aircraft Surface Contamination

AOP014-3 Airline Communication and Marketing Note:

This course is made up of the following modules:

- Governing Bodies Within the Aviation Industry
- Flight Dispatch
- Communications
- Airline Marketing

## **PROGRAM OF STUDY NOTES**

Important Note: You can only register for the program, not for an individual course. You can start anytime. The price of the program is \$375.

## **Course Descriptions**

#### Semester 1

**Airline Safety and Security** (AOP012) (3 credits) This course is part of the Airline Operations Certificate Program.

Airline Communication and Marketing (AOP014) (3 credits)

This course is part of the Airline Operations Certificate Program.

## Airport Administration and Services

Section B.37 6/2/2020

SAULT

Special Non-Post Secondary Certificate (150 hours - Part-time Distance Education ) (8110)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## PROGRAM OVERVIEW

Airports have been changing from Transport Canada Administration to being owned and operated by municipally and locally owned companies. This program will provide the individual with the knowledge to work in a complicated airport environment. The individual will have an understanding of all aspects of airport operations and will be able to contribute in each of the different functions. This program is designed for those who wish to get into the airport industry and consolidates information for those already working for an airport and who wish to advance in their chosen field.

You can start this program anytime. All program material is included in the program fee. You have one year to complete the program. Students in this program are not eligible for OSAP funding.

Fill out the <u>Registration Form</u> and email or drop-off to Sault College at the address stated on the form to begin learning.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School graduate or 19 years of age or over.

## **CAREER PATHS**

Graduates may seek employment as an Airport Manager, Airport Operations Officer, Airport Maintenance Manager, Manager of Safety and Security, Airport Marketing and Administration Officer.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca</u>.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

AAS010-3 Airport Operations and Maintenance Note:

This course is made up the following modules:

- Airport Maintenance Operations
- Airport Equipment Operations
- Winter Operations
- Airside Facilities
- Air Terminal Development and Operations
- Airport Aprons and Special Aviation Events

AAS012-3 Airport Planning and Marketing Note:

This course is made up the following modules:

- History of Airports
- The Airport Community
- Airport/Airline Interface
- Airport Planning
- Airport Marketing
- Airport Accounting

AAS014-3 Airport Safety and Security Note:

This course is made up the following modules:

- Airport Safety
- Airport Security
- Airport Emergency Planning
- Airport Rescue and Firefighting
- Navigational Aids and Radio Procedures
- Airport Noise
- Airport Environment Program
- Aviation Fuelling

## **PROGRAM OF STUDY NOTES**

Important Note: You can only register for the program, not for an individual course. You can start anytime. The price of the program is \$480.

## **Course Descriptions**

#### Semester 1

**Airport Operations and Maintenance** (AAS010) (3 credits) This course is part of the Airport Administration and Services Certificate Program.

#### Airport Planning and Marketing (AAS012) (3 credits)

This course is part of the Airport Administration and Services Certificate Program.

## Airport Safety and Security (AAS014) (3 credits)

This course is part of the Airport Administration and Services Certificate Program.

## Airport Wildlife Management

Section B.38 6/2/2020

SAULT

Special Non-Post Secondary Certificate (75 hours - Part-time Distance Education ) (8115)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## PROGRAM OVERVIEW

All airports must operate at a level which will provide a safe and efficient operation for the travelling public. Wildlife has always been recognized as a hazard to aviation and even more so in the vicinity of an airport. The participant will have a detailed understanding of all aspects of wildlife management while learning how to work in a complicated airport environment.

You can start this program anytime. All program material is included in the program fee. You have one year to complete the program. Students in this program are not eligible for OSAP funding.

Fill out the <u>Registration Form</u> and email or drop-off to Sault College at the address stated on the form to begin learning.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School graduate or 19 years of age or over.

## **CAREER PATHS**

Graduates may seek employment as a Wildlife Control Officer at an airport.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca</u>.

## **PROGRAM OF STUDY**

SEMESTER 1 AWM010-3 Airport Wildlife Control Note:

This course is made up the following modules:

- Introduction to Wildlife Management
- Habitat Modification
- Wildlife Dispersal Techniques
- Exclusion and Removal Methods

AWM012-3 Airport Wildlife Identification **Note:** 

This course is made up the following modules:

- Bird Profiles
- Mammal Profiles
- Wildlife Management Awareness / Safe Firearms Use
- Airport Wildlife Management Plan
- Bird Identification

## **PROGRAM OF STUDY NOTES**

Important Note:

You can only register for the program, not for an individual course. You can start anytime. The price of the program is \$375.

## **Course Descriptions**

#### Semester 1

#### Airport Wildlife Control (AWM010) (3 credits)

This section of the program looks at habitat modification, wildlife dispersal techniques, exclusion methods, safte firearms use and airport wildlife management.

#### Airport Wildlife Identification (AWM012) (3 credits)

This section of the program looks at wildlife management awareness, bird identification, bird profiles and mammal profiles.

# **Business Applications**

Certificate (Part-time Distance Education ) (2023) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## PROGRAM OVERVIEW

Business Applications can be completed entirely online through OntarioLearn and is intended to develop a high level of competence with office technology and an introduction to office administration. Individuals who have experience with office technology and administration but would like to upgrade their skills to a higher level will benefit from this program. Individuals that have limited experience in an office setting but want to seek training that will prepare them for this environment will also benefit.

All courses are offered online via the internet. Online courses begin every January, May and September. Some courses are also offered starting each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

It is highly recommended that students be familiar with how to operate a computer and have the ability to use Microsoft Office software (Access, Excel and Word) at a basic level.

OSSD or mature student status.

#### **CAREER PATHS**

Office Assistant, Academic Assistant, Clerical, Customer Service.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

#### **PROGRAM OF STUDY**

SEMESTER 1 OEL1173-3 Excel Expert OEL1372-3 Access 2016 Core OEL156-2 Word - Expert OEL384-3 Building and Maintaining Customer Relationships OEL620-3 Business Writing Strategies Electives:

Choose one of the following electives:

- OEL1024 Accounting Basics I
- OEL140 Office Technology and Procedures

• OEL617 Intro to Project Management

#### Note:

OEL1222 Windows 10 is also a required course for graduation.

## **Course Descriptions**

#### Semester 1

#### Excel Expert (OEL1173) (3 credits)

This course is designed to teach advanced topics on Microsoft Excel. Students will learn how to create advanced spreadsheets and be able to manipulate data. Excel is a powerful tool for creating complex electronic workbooks and charts used by an increasing number of industries competing in today's global marketplace.

#### Access 2016 Core (OEL1372) (3 credits)

Microsoft Access is a computerized database that allows you to manipulate, link, chart, query and report your data to customize the information you need. You will learn to use Microsoft Access 2016 to create databases, view, format, manage and modify data tables and fields. You will learn to create forms, queries, reports and explore data relationships using its pull-down menus, toolbars and dialog boxes. Microsoft certified courseware publication is used to present the software features in a well-illustrated graphic format to prepare students to complete the appropriate Microsoft Certification exam #77-730 for students who wish to write the MOS (Microsoft Office Certification). Students can identify Access Skills to potential employers by successfully completing the course capstone project to earn a skills badge

#### Word - Expert (OEL156) (2 credits)

Students will learn the advanced software features required to organize and prepare complex professional documents.

#### Building and Maintaining Customer Relationships (OEL384) (3 credits)

In this course, you will develop an understanding of customer service and the skills associated with understanding the needs of customers, meeting those needs, and fostering and environment that encourages customers to return.

#### Business Writing Strategies (OEL620) (3 credits)

Students develop practical writing skills using technology for successful communication in business. They learn how to compose business correspondence including emails, memoranda, letters, and reports, with a focus on routine, persuasive and negative messages. A review of grammar and mechanics is included.

# Children's Mental Health

#### Certificate (3054)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This online certificate is designed for busy professionals who are currently working with infant, child and adolescent populations with potential mental health challenges. Professionals who may benefit from this certificate include those currently working in health care and / or community services with an interest in working with children. They will gain the relevant knowledge and skills to effectively work with infants, children or adolescents with complicated psychiatric disorders. The interactive online courses in this program will focus on the developmental process; understanding psychiatric disorders and associated behaviours, risk factors and triggers; the identification of behaviours and symptoms; family relationships; and intervention and prevention strategies.

#### **PROGRAM OUTCOMES**

Graduates of this program will be able to

- 1. Explain cognitive and behavioural signs and symptoms and their continuous effect/influence on the behaviour and mental health of the infant, child, and adolescent.
- 2. Develop and implement basic strategies to effectively manage the common symptoms of mental health conditions seen in infant, child and adolescent populations.
- 3. Prepare a basic needs assessment of trauma, grief, loss and/or psychiatric disorder for an infant, child or youth in crisis.
- 4. Identify the stages of growth and development as well as basic needs for infants, children and adolescents with an emphasis on the critical periods in personality development.
- 5. Identify social role structure issues and their potential positive and negative influence on growth and development.
- 6. Explain preventative measures that promote the mental health and well-being of children and youth in their communities.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older

Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate.

Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

## **CAREER PATHS**

Early Childhood educators, educational assistants, child and youth workers, teachers, guidance counselors, physiotherapist assistants, occupational therapist assistants, personal support workers, and nurses may find this online certificate program beneficial in their professional practice and career development.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: https://www.jobbank.gc.ca/

## **CERTIFICATIONS**

Upon successful completion of the online Children's Mental Health certificate program, students will obtain a Sault College certificate.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1261-3 Cognitive Development OEL1262-3 Family Relations OEL1263-3 Prevention and Intervention Strategies OEL1264-3 Psychiatric Disorders OEL1265-3 Risk Factors of Common Psychiatric Disorders OEL1266-3 Mental Health and Society

## **Course Descriptions**

#### Semester 1

#### Cognitive Development (OEL1261) (3 credits)

Learners will determine the effects of trauma on cognitive development of infants, children and adolescents. Students will also identify those children with trauma histories in order to limit the potential triggers within the therapeutic environment. The theories of loss and grief, as these relate to the infant, child and adolescent population will be explored throughout the course

#### Family Relations (OEL1262) (3 credits)

Students will examine the interconnectedness of family relationships and their effect on common abnormal psychiatric disorders in the infant, child and adolescent populations. This course will review the developmental stages, familial structures and family functions through the lens of family systems theory. Students will also explore the environmental effects and their influences on the family as a dynamic entity.

#### Prevention and Intervention Strategies (OEL1263) (3 credits)

Students will apply prevention and intervention strategies to appropriately respond to stressful situations in the infant, child and adolescent population. The focus of this course is on the effective application of communication, critical thinking and problem solving skills in a variety of situations.

#### Psychiatric Disorders (OEL1264) (3 credits)

To understand complicated mental health disorders common to infant, child and adolescents, students will review a variety of abnormal cognitive and behavioural disorders. This course will emphasize an understanding of the behaviours and the daily effects and challenges on the mental health of the infant, child, and adolescent population.

#### Risk Factors of Common Psychiatric Disorders (OEL1265) (3 credits)

Students will recognize the risk factors and triggers associated with common psychiatric disorders in the

infant, child and adolescent population. Early identification and awareness of the behaviours will enable the student to appropriately identify and assess the situation at hand.

#### Mental Health and Society (OEL1266) (3 credits)

This course focuses on a multi-disciplinary examination of the ways in which mental health and addiction are viewed by society and how these perceptions influence society's response to the practical and socio-political aspects of mental illness. Students will examine personal attitudes, societal myths, and stereotypes related to mental illness and addiction. Students will be challenged to critically reflect upon how their personal orientations and resulting behaviours about mental illness, addiction, and wellness impact their cultural, societal and political beliefs.

Drawing on literature, arts, politics, media, medicine, and the social sciences, students will critically examine mental illness and addiction as a social construct and contrast and compare assumptions of agency, normalcy, treatment, and recovery. Students will also learn firsthand from those with mental illness, evaluate the effects of mental illness in special populations including Indigenous people and the elderly, and apply their learning through health simulation activities. Finally, students will explore ways that those affected by mental illness and addiction construct and assess themselves.

## **Client and Customer Relations**

Section B.41 6/2/2020

Certificate (1227) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

This online certificate provides learners with strategies, approaches, and techniques to enhance client relations and enable customer service excellence. Graduates of the program will have the tools necessary to build a quality service delivery team and develop positive lasting relationships with internal and external clients and customers, while also being prepared to identify, mitigate and avoid confrontational situations.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older

Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate

Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate

## **CAREER PATHS**

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **CERTIFICATIONS**

Upon successful completion of the online Client and Customer Relations certificate program, students will obtain a Sault College certificate.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1321-2 Customer Service & Ethics OEL1322-3 Developing Client Service Teams OEL1323-3 Management Principles OEL1324-3 Strategies for Fostering Client Loyalty OEL1325-2 Creating a Corporate Service Culture OEL384-3 Building and Maintaining Customer Relationships OEL851-2 Human Relations

## **Course Descriptions**

#### Semester 1

#### Customer Service & Ethics (OEL1321) (2 credits)

You will focus on topics pertaining to customer service and the achievement of equity in various social and work settings, including, but not limited to, race, gender, ethnicity and social orientations. This course will

enable you to identify possible strategies for empowerment in the workplace.

#### Developing Client Service Teams (OEL1322) (3 credits)

Students explore the economics of client value and the importance of building a quality service delivery team that ensures that service is provided in a stellar fashion and that employees buy into corporate culture and strategies that deliver the bottom line stakeholders are hoping to achieve.

#### Management Principles (OEL1323) (3 credits)

Focus is placed on the development of modern management; organizational theory; the processes of planning, organizing, directing, and controlling; communications; behavioural strategies and techniques; ethical and social responsibilities in the practice of management; and an overview of human relations.

### Strategies for Fostering Client Loyalty (OEL1324) (3 credits)

Goods and services are no longer an adequate basis for establishing relationships with clients because they attach an emotional connection to the products they use and to the businesses at which they shop. Students explore insights and ideas in order to create lasting and genuine customer relationships that withstand the competitive overtures of other companies. They explore the process of developing and sustaining client relationships that establish an emotional connection, manage difficult relationships, (such as those that take place via technology or at great distances) and help to determine the pulse of client relationships.

## Creating a Corporate Service Culture (OEL1325) (2 credits)

Students review the basics of corporate culture and how corporate culture impacts on customer service. Areas of study include service environment, organizational openness and influencing others to adopt a service culture. As a project, students learn to create a customer service culture action plan based on identifying gaps between current and desired practices.

#### Building and Maintaining Customer Relationships (OEL384) (3 credits)

In this course, you will develop an understanding of customer service and the skills associated with understanding the needs of customers, meeting those needs, and fostering and environment that encourages customers to return.

#### Human Relations (OEL851) (2 credits)

What makes people tick and how to keep them going! Human Relations will improve your understanding of people. You will discuss motivation, handling conflict, delegation, building morale and more. Studying these topics will give you practical insights into handling people more effectively and improve your overall performance.

## Commercial Construction Management

Section B.42 6/2/2020

**Certificate (Part-time Continuing Education ) (4089)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## 

## **PROGRAM OVERVIEW**

This certificate program provides practical training leading to the application of principles and practices in the commercial Construction Management field. This program emphasizes not only the interpretation and understanding of commercial project documents (working drawings, specifications, soils reports, contracts, etc.) but also in the preparation of estimates and construction schedules. Providing an educational foundation in the Construction Management field, graduates have the knowledge to begin assisting or managing the construction process, from initial planning to project completion. The use of case studies and related industry scenarios throughout the program prepares students for a full range of situations that emerge during the course of a construction project.

All courses are offered online via the internet. Online courses begin every January, May and September.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 (C) ENG4C or mature student status.

## **CAREER PATHS**

This certificate is intended for those thinking of taking courses to break into the construction industry or to use their present building knowledge to work towards advancement. This certificate can open doors that will lead to many careers in the construction industry and those completing it will have potential to be a vital member of the construction team.

Employment in many areas of the construction industry, including material take-off, commercial estimating, commercial tender closing, project co-ordination, construction/project management assistant and possibly construction or project management.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **PROGRAM OF STUDY**

SEMESTER 1 OEL1130-3 Construction Industry OEL1131-3 Commercial Construction Principles OEL1132-3 Commercial Construction Estimating OEL1133-3 Project Construction Management OEL1134-3 Construction Planning and Scheduling OEL874-3 Green Building and Construction Practices

## **Course Descriptions**

#### Semester 1

#### Construction Industry (OEL1130) (3 credits)

This course explores the many facets of the construction industry and develops a deeper knowledge of the many factors that impact this industry. Increase your awareness of various participants and stakeholders that are typically involved in a commercial construction project, as well as and issues such as impact on the economy, safety, environmental, and use of technology.

This course has achieved accreditation by the Gold Seal Accreditation Board of the Canadian Construction Association. For more information about Gold Seal training, please visit the CCA website at the link below.

#### https://www.goldsealcertification.com/about/training/accredited-training/

#### Commercial Construction Principles (OEL1131) (3 credits)

Explore various building materials and construction methodologies used in commercial construction, including: durability, availability, ease of construction, and aesthetic perspective. Studies include a review of commercial construction drawings and specifications. Use a variety of learning tools including standard building practices, commercial working drawings, and trade publication websites. In this online course you will use a variety of learning tools including standard building practices, commercial working tools including standard building practices, commercial working drawings, and trade publication websites. Participate in readings, quizzes, research, discussions and collaboration work groups.

#### Commercial Construction Estimating (OEL1132) (3 credits)

This course introduces you to measuring techniques for items in a commercial construction project. Utilizing Excel spreadsheets, you will interpret construction working drawings and specifications to measure items such as excavation, concrete, steel, etc. Emphasis is placed on accuracy of measurement, standard descriptions, logical sequence of take-off, and estimating principles. The parts of a detail estimate will be identified.

#### Project Construction Management (OEL1133) (3 credits)

The course provides you with basic knowledge of the principles of planning, organizing, and controlling administrative aspects of a project in the commercial construction industry. The contents of this course will prepare you for the day to-day administrating, planning and monitoring of a small to mid-sized commercial project.

#### Construction Planning and Scheduling (OEL1134) (3 credits)

This course introduces you to the concept of construction scheduling and planning. This course will explore applications of effective project planning and analysis. Topics include Gantt schedule, CPM, Critic Path Planning, Resource allocation, Cash Flow Planning, Schedule Monitoring and Productivity Factors. You will complete a detailed schedule for a small commercial project.

This course has achieved accreditation by the Gold Seal Accreditation Board of the Canadian Construction Association. For more information about Gold Seal training, please visit the CCA website at the link below.

#### https://www.goldsealcertification.com/about/training/accredited-training/

#### Green Building and Construction Practices (OEL874) (3 credits)

Students explore many facets of building green in the construction industry from a general contractor?s (builder?s) perspective. Students will gain an introductory knowledge of the Canada Green Building Council (CaGBC), Net Zero Energy program and the various LEED Rating Systems with an emphasis on new construction. The significance of the elements of green construction, green procurement, and contracting for green construction as they relate to a contractor?s green strategy are addressed.

This course has achieved accreditation by the Gold Seal Accreditation Board of the Canadian Construction Association. For more information about Gold Seal training, please visit the CCA website at the link below.

https://www.goldsealcertification.com/about/training/accredited-training/

# Criminal Psychology and Behaviour

Section B.43 6/2/2020

Certificate (1235)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

This part-time online certificate program explores why individuals become criminals, why individuals are attracted to those with deviant behaviours, and what methods are used in the rehabilitation of criminals and victims.

The program is designed for individuals who have a special interest in criminal psychology and behaviour or who work within social services, law enforcement, or criminal justice settings where an understanding of criminal psychology and behaviour is an asset.

Students will learn about a variety of topics including co-dependency as an addiction; domestic, sexual, and workplace violence; human trafficking; and cults and terrorism.

Learners must complete seven compulsory courses listed below

- Criminal Psychology Psychopathic Minds
- Criminal Psychology II Criminal Minds
- Domestic and Workplace Violence
- Sexual Violence
- Co-Dependency as an Addiction
- Cults and Terrorism
- Human Trafficking & Intersectionality

#### **PROGRAM OUTCOMES**

Graduates will be able to:

1. Explain and discuss various theories related to psychopathic behaviours and anti-social personality disorders.

- 2. Describe factors which lead individuals towards deviant behaviours.
- 3. Describe methods used in the rehabilitation of criminals and victims.
- 4. Explain the role that psychological disorders and chemical dependence can play in crime.
- 5. Examine biological versus social explanations for various forms of abuse.
- 6. Describe elements which contribute to violent behaviour.
- 7. Explain the various theories and ideologies surrounding cults and terrorism.
- 8. Explain co-dependency and its relationship to abuse.

9. Identify the types of human trafficking most common in Canada, grooming behaviours of human traffickers, and the needs of survivors.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

- Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older
- Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate.
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate
- Students are recommended to have completed at least one post-secondary psychology course prior to beginning this program.

## **CAREER PATHS**

Upon completion of the program, individuals may find employment opportunities within criminal justice settings or within social service settings such as group homes and women's shelters. This program is designed for professionals who want to effect change and advance their career while learning about topical cross-cutting issues that are relevant across sectors (e.g. human trafficking).

Potential career and industry options may include working in:

- Policing
- Corrections
- Group Homes or Shelters
- Community-Based Victim-Oriented Resource Centres
- Social Services

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca.</u>

## **CERTIFICATIONS**

Upon successful completion of the online Criminal Psychology and Behaviour certificate program, students will obtain a Sault College certificate.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1355-3 Co-dependency as an Addiction OEL1356-3 Cults and Terrorism OEL218-3 Criminal Psychology I - Psychopathic Minds OEL219-3 Criminal Psychology II - Criminal Minds OEL246-3 Sexual Violence OEL289-3 Domestic and Workplace Violence OEL8003-3 Human Trafficking & Intersectionality

## **Course Descriptions**

#### Semester 1

**Co-dependency as an Addiction** (OEL1355) (3 credits) This online course provides an overview of how individuals can become addicted to others and relationships. It will examine the personalities of abusers and those who are abused. How individuals with complimentary personality disorders unite and form bonds will be examined. Object Relations Theory and how women and men are unconsciously drawn to abusive partners because of personality disorders caused by childhood abuse or neglect will be the focal point of this course. Students will learn how individuals with co-dependent personalities can become capable of breaking free from the cycle many get caught in.

### Cults and Terrorism (OEL1356) (3 credits)

In this course, students will explore the historical evolution and social impact of cults and terrorist groups. Students will learn ways to identify and define cults. Using discussions and active learning approaches, students will examine what motivates cults and terrorist groups with a specific lens towards violent activity. The impact of media and globalization will also be discussed. Students will advance their social and cultural understanding and gain awareness of cults in contemporary society. Students in this course will discuss the validity of historical evidence and research historical interpretations of events using relevant and recent sources.

## Criminal Psychology I - Psychopathic Minds (OEL218) (3 credits)

What makes a psychopath tick? Are they born that way, or are they products of society? Are serial killers really possessed with evil, or do they know exactly what they are doing? In this course, students will study how and why some individuals become criminals and why some actually become killers. You will study what is known about serial killers, stalkers, rapists and criminals. Also, the latest techniques used in criminal profiling and questioning will be examined.

## Criminal Psychology II - Criminal Minds (OEL219) (3 credits)

This course further explores issues discussed in Criminal Psychology-Psychopathic Minds, and compares and explains psychological models as they relate to criminology.

#### Sexual Violence (OEL246) (3 credits)

Sexual violence is an ugly reality and a societal concern. This course will examine the many forms of sexual violence perpetrated by individuals. Students will study sexual violence in the context of male toward female, female toward male, as well as incest and child abuse in families. Reasons for sexually deviant behaviours (why individuals do what they do), and the latest approaches and strategies for treating both victims and perpetrators will be examined.

## Domestic and Workplace Violence (OEL289) (3 credits)

This course examines family, school yard and workplace violence. Issues such as how and why co-dependency exists, the battered wife syndrome and abusive males will be addressed. Students will also examine why bullying exists in schools, and why confrontation can escalate into violence in the workplace. Strategies for dealing with domestic, schoolyard and workplace violence will be explored. Conflict resolution strategies will be developed.

## Human Trafficking & Intersectionality (OEL8003) (3 credits)

Human trafficking is estimated to affect 21 million people worldwide. Canada is not exempt from this. This course is designed for law enforcement professionals, healthcare professionals, and professionals working in social services. Topics to be covered will include indicators and warning signs of human trafficking, referral services, and when and how to intervene.

## Data Analytics in Business Decision-Making

Section B.44 6/2/2020

**Ontario College Graduate Certificate (2710)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

Organizations are relying more than ever before on their internal and external data sources to drive business planning, decision-making, and problem solving. Business intelligence and big data tools accomplish this by enabling unprecedented data collection and data manipulation. This data provides organizations with the information they need to respond quickly to organizational and market changes and opportunities.

Sault College's fully online Data Analytics for Business Decision-Making Ontario College Graduate Certificate program will provide you with the skills and knowledge needed to support real world business decision-making and planning through data insights, data management, and data science. The program will provide you with a blend of theoretical knowledge and hands-on practical skills for data collection, data analysis, and data manipulation.

#### Learners will complete the following twelve compulsory courses.

- OEL1352 Introduction to Data Analysis
- OEL1373 Data Collection and Data Management
- OEL1351 Data Analysis Tools for Analytics
- OEL1374 Business Analysis and Assessments I
- OEL1376 Statistical and Predictive Modelling for Analytics I
- OEL1353 Visualizations, Leadership, and Business Communications I
- OEL1377 Statistical and Predictive Modelling for Analytics II
- OEL1375 Business Analysis and Assessments II
- OEL1378 Visualizations, Leadership, and Business Communications I
- OEL1379 Project Management for Analytics
- OEL1380 Critical and Ethical Decision Making
- OEL1381 Capstone Data Analytics

#### **PROGRAM OUTCOMES**

Graduates will be able to:

- Analyze, organize, and manipulate data to support problem solving, business decision-making, and opportunity identification.
- Develop statistical and predictive models that use operational and marketing data to identify patterns and provide insights to business stakeholders.
- Assess and apply business intelligence and Big Data tools appropriate to the business decisions, business problems, data movement, and system workloads.
- Prepare and communicate data analysis reports and documents in various formats for a variety of audiences and purposes.
- Analyse and interpret data as it relates to various aspects of a business organization's readiness to change.
- Conduct data analysis and research in a respectful and ethical manner that protects privacy and maintains dignity to all involved.

• Deliver data oriented projects using data science, business analysis, and project management principles, tools, and techniques to ensure clients` business needs are achieved.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

#### **Minimum Academic Requirements**

- A College Diploma, Advanced Diploma, or Degree in business, computer programming, computer systems or information technology OR acceptable combination of related work experience and post-secondary education as judged by the College to be equivalent to the above.
- Applicants possessing degrees/diplomas from institutions where the language of instruction was not English will be required to provide test scores as evidence of their English language proficiency such as IELTS 6.5 with no bands less than 6.0, or equivalent scores in other recognized standard tests of English.
- Students must successfully complete all courses within 3 years of acceptance into the program in order to graduate.
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

Note: A comfort in mathematics, statistics, computer software, computer programming, and enterprise systems is recommended.

## **CAREER PATHS**

Graduates of the program may find employment in various industries including marketing, retail, finance, insurance, healthcare, consumer packaged goods, tourism, government, media, public affairs, education, social planning, human resources, and consulting businesses and organizations.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca.</u>

## **CERTIFICATIONS**

Upon successful completion of the online program, students will obtain a Ontario College Graduate Certificate.

#### **OTHER INFORMATION**

Courses in this program deal with large data sets and complex models. We recommend that students meet the minimum computer requirements listed below.

Hardware:

- Intel I7 or AMD A10 processor or better with chipset that must support virtualization
- 16 GB of RAM
- 1 TB hard drive
- Ethernet Network Card

- Wireless Network Card
- One USB 3.0 port (two preferred)

Software:

Windows 10 Professional Edition

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1351-3 Data Analysis Tools for Analytics OEL1352-3 Introduction to Data Analysis OEL1353-4 Visualization, Leadership, and Business Communication I OEL1373-3 Data Collection And Management OEL1374-3 Business Analysis And Assessments I OEL1375-3 Business Analysis And Assessments II OEL1376-4 Statistical And Predictive Modelling For Analytics I OEL1377-4 Statistical And Predictive Modelling For Analytics II OEL1378-4 Visualization, Leadership, And Business Communications II OEL1379-3 Project Management For Analytics OEL1380-3 Critical And Ethical Decision Making OEL1381-4 Data Analytics Capstone

## **Course Descriptions**

#### Semester 1

#### Data Analysis Tools for Analytics (OEL1351) (3 credits)

Students are introduced to different scripting language tools such as SQL, NOSQL, Apache, Java and Python that support data analysis on large volumes of data. They also analyze the strengths and limitations of current tools used today. Students review and recommend which tools best support data analysis, data quality, problem solving, analysis, analytics and business decision-making for different functions and industries.

#### Introduction to Data Analysis (OEL1352) (3 credits)

Students are introduced to data analysis principles, practices, and approaches used in research, Big Data, data science, and artificial intelligence. They will analyze the algorithms and statistical models used to support analytics and business decision-making for different industries and functions.

#### Visualization, Leadership, and Business Communication I (OEL1353) (4 credits)

Students are introduced to fundamental best practices and tools for presenting data analysis using visuals, tables, info graphs, and reports. They will assess verbal and visual presentation approaches, as well as ethical leadershippresence techniques to better communicate with and motivate business stakeholders to make informed decisions. Students will also recommend how to best communicate with these business decision-makers using data visualization tools, such as Tableau, and storytelling so decision-makers will better trust the data.

#### Data Collection And Management (OEL1373) (3 credits)

Students are introduced to data sources, informatics, data models, data management and data ownership; all key components to the data-driven organization. They analyze the common practices, prioritization approaches, system workload and security challenges for systems that support high data volumes and analytics. Students assess the individual, legal and society impacts of collecting data, including social media data. They also assess the historic problems with data collection and data management and how the

current tools are used to address these problems.

### Business Analysis And Assessments I (OEL1374) (3 credits)

Students are introduced to fundamentals for strategy and business analysis best practises, approaches and principles for identifying and securing market and organizational opportunities. They assess how data analysis and analytics are used in needs analysis, opportunity identification, business problem solving, improvements, leadership ethics and business stakeholder communications.

### Business Analysis And Assessments II (OEL1375) (3 credits)

Students deepen their perspective understanding in strategy and business analysis best practises for identifying and securing market and organizational opportunities. They conduct research and assess how data analysis and analytics are used in needs analysis, opportunity identification, changing culture, changing business models, corporate politics and strong business stakeholder personalities. Students recommend approaches based on organizational needs, business stakeholders and corporate culture.

## Statistical And Predictive Modelling For Analytics I (OEL1376) (4 credits)

Students are introduced to statistical models and predictive models that support data analytics and business decision-making. They will apply statistical approaches and algorithms to identify model structures to help solve business problems. Students will recommend how to best integrate and calibrate these models and algorithms to increase data quality, usability, and improve predictive analyses to improve system workload and business decision-making.

### Statistical And Predictive Modelling For Analytics II (OEL1377) (4 credits)

This course will build on the learning from the Statistical and Predictive Modelling I course and cover more advanced concepts such as regression analysis, clustering algorithms, conjoint measurement, and decision tree analysis. Students will be able to integrate and calibrate these model structures for evaluation and implementation purposes.

## Visualization, Leadership, And Business Communications II (OEL1378) (4 credits)

Students will deepen their understanding in best practices and tools for presenting data analysis. They will assess rhetoric presentation approaches and executive presence techniques to better communicate with and motivate business stakeholders to act as a group. Students will recommend how to best influence business decision-makers that are resistant to change.

## Project Management For Analytics (OEL1379) (3 credits)

Students are introduced to best practices, approaches, and tools for managing and delivering analytics, predictive analyses, ETL, and data projects. They will assess approaches around estimation, scoping, planning, data cleaning, data migration, data quality, and risk mitigation. Students will recommend how to best communicate their assessments to business stakeholders.

#### Critical And Ethical Decision Making (OEL1380) (3 credits)

Students are introduced to business ethics, applied ethics, and social psychology. They will assess today's most important ethical dilemmas and the human behaviors that drive them. Students will recommend how to best navigate corporate landscapes, political influencers, and social contexts to ensure ethical decision-making.

## Data Analytics Capstone (OEL1381) (4 credits)

## **Developmental Services Support**

#### Certificate (1280)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## Section B.45 6/2/2020

## **PROGRAM OVERVIEW**

If you are passionate about a career in Developmental Services, want to have a positive impact on the lives of those with developmental disabilities and are looking for personal and professional satisfaction, this certificate program will guide you towards your goals. Course work will focus on professionalism, health and wellness, building relationships and advocacy for community inclusion. This will give you a solid foundation for your field placement hours with Community Living Algoma. Successful completion of the certificate with a G. P. A. of 60% or higher guarantees an interview with CLA for employment. Students may also find employment in providing private respite supports or at other community based services.

#### **PROGRAM OUTCOMES**

Successful completion of the Development Services Specialist Certificate program indicates that the graduate has reliably demonstrated the ability to:

1. Conduct oneself in an ethical, competent and accountable manner in all professional relationships.

2. Provide person-directed and individualized supports and services that respect and promote self-determination and quality of life for people with developmental disabilities.

3. Provide for the safety of people with developmental disabilities, self and others in compliance with all applicable legislations, regulations and standards of practice.

4. Support health and well-being of people with developmental disabilities.

**5.** Demonstrate advocacy in the development of inclusive communities.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Students must obtain a grade of 50% or higher to pass each course.

Students must obtain a G.P.A. of 60% or higher to obtain this certificate.

Students have seven years to complete the certificate requirements.

#### **ADMISSION PROCEDURES & SELECTION PROCESS**

A graduate of a degree, diploma or certificate in the Human Services field (such as: PSW, RPN, RN, CYC, OTA/PTA, SSW).

This program is free to apply! Fill out the paper application and fax it to 705-759-2984 or email it to continuingeducation@saultcollege.ca.

## **CAREER PATHS**

Graduates may find work at Community Living Algoma, private respite care or other developmental services agencies.

## **CLINICAL/LAB OR FIELD PLACEMENTS**

Fieldwork Requirements include:

Current First Aid and CPR -C

Police Record Search

Health and Immunization Record

Statement of Confidentiality

Student Workplace Agreement

WHMIS

## **OTHER INFORMATION**

For further information, contact Carla Bumbaco at <u>Carla.Bumbaco@saultcollege.ca</u> or 705-759-2554 ext. 2658.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

DSS100-1 Introduction to Developmental Disabilities DSS101-1 Professionalism in Devlopmental Services DSS102-3 Health and Wellness DSS103-1 Personal Outcome Measure and Planning DSS104-1 Positive Approaches and Community Inclusion DSS105-1 Technology and Documentation DSS106-8 Fieldwork

## **Course Descriptions**

Semester 1

#### Introduction to Developmental Disabilities (DSS100) (1 credits)

Through this course, students will learn about the history and evolution of Developmental Services in the province of Ontario and be provided with an overview of current supports and services provided provincially, across the District of Algoma and by Community Living Algoma. Current trends in the developmental services sector will be discussed. Community Living Algomas mission and vision statements, values and organizational goals and priorities will be reviewed. The second half of the course will focus on sharing information about specific diagnoses, dual-diagnosis and aging.

#### Professionalism in Devlopmental Services (DSS101) (1 credits)

This course will identify standards regarding verbal and written communication skills with an emphasis placed on the use of respectful language. Key characteristics of strong interpersonal skills, healthy boundaries, and effective team-building will be examined. Students will learn how to build positive relationships with families and community partners. Professional growth and development goals will be identified through core competencies for developmental services.

### Health and Wellness (DSS102) (3 credits)

This course takes an in depth look at the Ministry of Community and Social Services Quality Assurance Measures with an emphasis on abuse awareness; prevention; and reporting requirements. Medication administration, policies and procedures, pharmacology and documentation will be reviewed. Successful completion of CLAs Medication Test with 80% is required. Safe lifts and transfers and occupational health and safety will also be reviewed. The final portion of this course will involve Safe Management training so that students can learn how to safely and effectively de-escalate crisis situations.

### Personal Outcome Measure and Planning (DSS103) (1 credits)

Through this course, students will be introduced to the definition and measurement of quality of life for people with developmental disabilities through a review of Personal Outcome Measures identified by The Council on Quality and Leadership. Improving quality of life through person-centered planning and goal setting will be examined. Students will learn about Individual Support Plans and create their own One Page Profiles. Human Rights and the Rights Review process will be discussed. The importance of financial plans identifying supports in place to assist with management and safeguards of personal finances will also be shared.

## Positive Approaches and Community Inclusion (DSS104) (1 credits)

Supporting people to share their strengths, gifts and capacities with their community is an important role of staff in developmental services. In this course, students will become familiar with Positive Approaches, the detrimental impact of social isolation and the importance of belonging. Students will learn about fostering independence, building social capital and discuss values and ethics in supporting people to have real lives. Course work will also include a focus on building capacity in advocating for others.

## Technology and Documentation (DSS105) (1 credits)

In this course, students will have an opportunity to review basic computer skills. Laws, policies and procedures regarding privacy and confidentiality will be reviewed. Information will be shared regarding CLAs specific documentation requirements and students will be introduced to the organizations data management systems. An opportunity to work on personal resumes will also be provided.

#### Fieldwork (DSS106) (8 credits)

Students will be provided with the opportunity to spend time with a 1:1 staff mentor and gain valuable hands-on experience with services provided by CLA. This will allow the opportunity to apply the theoretical knowledge gained through the other courses and to gain an understanding of the important role that support staff play in the lives of people with developmental disabilities. Students will come together weekly for seminar discussions and to share experiences.

## **Diversity and Intercultural Relations**

Section B.46 6/2/2020

Certificate (Part-time Continuing Education ) (1270) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## 

## **PROGRAM OVERVIEW**

Globalization brings the peoples of the world closer together. However, discrimination and other forms of intolerance continue to cause problems. In our increasingly multicultural society these issues can lead to exclusion and inequality, often along racial and ethnic lines.

This certificate program is a direct response to learning needs identified by a broad range of representatives from multicultural, health, community services and justice agencies who recognize that racial inequity and negative stereotyping are significant social problems. In this six course certificate, learners will examine diversity issues in a social context, explore critical differences in cross-cultural communication and identify the sources, causes, forms and manifestations of these issues in our society.

This program is available online. Courses start January, May and September. Some courses start on a monthly basis.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 (C) ENG4C or mature student status.

## **CAREER PATHS**

The Diversity and Intercultural Relations Certificate is intended to enhance the graduates ability to work effectively with co-workers and clients, enabling them to become more effective and productive in their chosen field. The graduate will acquire greater confidence when confronted both professionally and personally with the complex issues arising from the interaction of different cultural and ethnic groups within Canada.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1156-3 Racism and Discrimination OEL127-3 Sociology Introduction OEL541-3 Introduction to Intercultural Communication OEL824-3 Contemporary Canadian Social Problems Electives: Choose two electives:

- OEL1048-3 Human Sexuality
- OEL1077-3 Religious Beliefs, Traditions and Customs of Death
- OEL1082-3 World Religions: Western and Eastern Traditions
- OEL325-2 First Nations People

#### **Course Descriptions**

#### Semester 1

#### Racism and Discrimination (OEL1156) (3 credits)

The main objective of this course is to enhance sensitivity to and intolerance of mistreatment based on racial or ethnic background and appearance, and to consider how to handle these issues as professional individuals in a pluralistic Canadian society. As part of the course, students will communicate with one another through electronic discussion and learn to appreciate through various readings and assignments the many facets of racism and discrimination. This course will be of interest to workers in health services, education, human resources, and business as well as those people who want to enhance their knowledge and sensitivity to issues of racism and discrimination particularly when communicating with people from other cultures or with physical appearances that differ from their own.

#### Sociology Introduction (OEL127) (3 credits)

Sociology is the study of people and how they interact with each other and various social groups. This course deals with the study of people's lives, their relationship to society as a whole, and how people are affected by the society in which they live. The concepts, theories and methods of the discipline will be introduced and discussed with particular emphasis on the dynamics of Canadian society and Canadian social problems.

#### Introduction to Intercultural Communication (OEL541) (3 credits)

Students taking this course will learn the definition of culture and will be introduced to inter-cultural communication theories such as differences in gestures, personal spaces, and customs. By identifying intercultural issues in North American society, student will learn how they can apply intercultural communication theories to their daily lives and how they can respect and understand persons from other cultures. The main objective of this course is to create an environment in which students will feel comfortable communicating with people from different cultures and backgrounds. Students will communicate with people from other cultures electronically and in person. This course will be of interest to workers in health services, education, human resources, and business as well as those people who want to enhance their communication skills.

#### Contemporary Canadian Social Problems (OEL824) (3 credits)

In this course, current social science paradigms and theories will be used as a framework for analysis of contemporary social issues relevant to vocations in police services. Topics such as crime, violence, abuse, social stratification, ageism, and racism will be included. The course focus will be on how individual behaviours collectively create social issues.

## Early Childhood Education Leadership

Section B.47 6/2/2020

Certificate (Part-time Distance Education ) (1061) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This part-time online certificate program is designed for learners who have an Early Childhood Education (ECE) diploma or equivalent and who wish to enhance their leadership skills or gain the knowledge and skills required to pursue a career as a supervisor, manager, or administrator of childcare services. Course curriculum focuses on staff supervision and leadership skills, financial management, performance management, marketing, advocacy and professionalism in child care settings, as well as intercultural communication and communication strategies.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

#### **Entrance and Certificate Requirements**

#### **Entrance Requirements:**

- Early Childhood Education Diploma or equivalent
- Although students can begin directly upon graduation from their ECE Diploma, students are advised to have at least one-year post-graduation ECE work experience

#### **Graduation Requirements:**

- Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate.
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

## **CAREER PATHS**

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca.</u>

## CERTIFICATIONS

Upon successful completion of the online Early Childhood Education Leadership certificate program, students will obtain a Sault College certificate.

## **PROGRAM OF STUDY**

## SEMESTER 1

OEL1326-3 Communication Strategies in Early Learning

OEL1327-3 Advocacy and Professionalism in Early Learning and Care OEL1328-3 Service Marketing in Early Learning and Care Programs OEL1329-3 Issues in ECE OEL1330-3 Management Leadership Skills and Staff Development for ECEs OEL1331-3 Computer Applications and Financial Planning in Early Childh OEL541-3 Introduction to Intercultural Communication OEL8004-2 Coaching and Mentoring OEL851-2 Human Relations

## **Course Descriptions**

#### Semester 1

#### Communication Strategies in Early Learning (OEL1326) (3 credits)

Students construct, practice and analyze a variety of communication strategies, related to the responsibilities of a Supervisor/administrator in Early Childhood environments. Students develop a professional communication portfolio which includes; sample formats for surveys, program brochures, business letters, media releases, newsletters, policies/procedures and business proposals. Additionally students assess and analyze which strategies are most effective with different client groups; children, parents, board of directors, volunteers, staff and other community professionals. Through online discussions, postings, case studies, readings, assignments and practical applications, students have the opportunity to practice and utilize effective communication skills including analysis, research, evaluation, and decision-making to affect change in the workplace.

#### Advocacy and Professionalism in Early Learning and Care (OEL1327) (3 credits)

Students examine historical, political, professional, and social issues affecting early childhood administration practice in current Early Learning programs. Students review professional responsibilities and practices of ECE supervisors and administrators and analyze them within recognized best management practices. Students review strategies characterizing advocacy roles and responsibilities for ECE supervisors that reflect an in-depth understanding of early childhood education and ethical practices within the context of a self-regulated profession. Additionally students develop strategies for personal and professional development growth in a management capacity. Through discussions, posting/presentations, case studies, readings, assignments and practical applications, students have the opportunity to practice and utilize advocacy and professional skills including analysis and reflective practices.

#### Service Marketing in Early Learning and Care Programs (OEL1328) (3 credits)

Students examine marketing principles and practices as they apply to the manager's role in the operation of early childhood education centre. Participants will research and develop marketing plans through the identification of the needs of clients and market demands, including SWOT and PEST analyses. Strategies for effective program marketing, publicity, and promotion will be determined and evaluated for effectiveness. Through discussions, presentations, readings, research, assignments and practical applications, students have the opportunity to prepare and evaluate effective marketing plans.

#### Issues in ECE (OEL1329) (3 credits)

Examine research into the impact of quality in child care, the importance of advocacy, child abuse, and other current issues. Contribute ideas of interest or concern and to participate actively in discussion. Develop the skill in locating, reviewing and critiquing related research literature, and to prepare to fulfill professional responsibilities in the area of child abuse.

## Management Leadership Skills and Staff Development for ECEs (OEL1330) (3 credits)

This subject explores effective communication and theories of leadership. Through a process of

self-evaluation, students will develop a professional leadership style appropriate to the role of an administrator of an early childhood education setting. Students will develop techniques to hire and maintain quality staff in an Early Childhood Education program.

### Computer Applications and Financial Planning in Early Childh (OEL1331) (3 credits)

Students are given a comprehensive overview of developing a financial plan to incorporate the requirements of a licensed ECE program. This involves the use of computer software.

#### Introduction to Intercultural Communication (OEL541) (3 credits)

Students taking this course will learn the definition of culture and will be introduced to inter-cultural communication theories such as differences in gestures, personal spaces, and customs. By identifying intercultural issues in North American society, student will learn how they can apply intercultural communication theories to their daily lives and how they can respect and understand persons from other cultures. The main objective of this course is to create an environment in which students will feel comfortable communicating with people from different cultures and backgrounds. Students will communicate with people from other cultures electronically and in person. This course will be of interest to workers in health services, education, human resources, and business as well as those people who want to enhance their communication skills.

## Coaching and Mentoring (OEL8004) (2 credits)

In this course you will learn about coaching and mentoring using a solution-focused approach, which emphasizes the use of purposeful compliments to both acknowledge and validate an individual's work. The course will cover a range of topics including describing what is meant by solution-focused coaching and mentoring, identifying the differences between coaching and mentoring, and exploring when and how to use each method. Participants will learn about the benefits of using a solution-focused approach, and become comfortable with the coaching and mentoring process.

#### Human Relations (OEL851) (2 credits)

What makes people tick and how to keep them going! Human Relations will improve your understanding of people. You will discuss motivation, handling conflict, delegation, building morale and more. Studying these topics will give you practical insights into handling people more effectively and improve your overall performance.

## Early Childhood Education Resource Consulting

Section B.48 6/2/2020

Ontario College Graduate Certificate (Part-time Distance Education ) (1051)705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This online post-diploma program is designed to provide early childhood educators with specialized knowledge, skills, and abilities to work as resource consultants with children who have special needs and their families. Graduates may work in a range of early years and childcare settings including centre-based and home-based childcare, child and family programs, schools, and children's services (e.g. supports for children with special needs, children's mental health services and early intervention programs) to support inclusive early learning environments. The program consists of five (5) online theory courses and two (2) field placements.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

#### Entrance Requirements:

- Early Childhood Education Diploma or equivalent
- Proof of current registration with College of Early Childhood Educators
- Applicants possessing degrees/diplomas from institutions where the language of instruction was not English will be required to provide test scores as evidence of their English language proficiency such as IELTS 6.0 with no band lower than 5.5, or equivalent scores in other recognized standard tests of English.

#### Graduation Requirements:

- Students must successfully complete all courses within 5 years of acceptance into the program in order to graduate.
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

## **CAREER PATHS**

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: http://www.jobbank.gc.ca.

## **CLINICAL/LAB OR FIELD PLACEMENTS**

Fieldwork experience provides the student with the opportunity to apply classroom theory to an actual employment situation.

All applicants with be required to submit documentation of having completed the following procedures prior to entering the field placement components of the program. If the appropriate documentation is not received at least two weeks before the start of the identified field placement, it may be necessary to

withdraw the student from the course.?

- A current (within six months) Police Record Search.?This is required by students as they are enrolled in a program during which they will have unsupervised access to vulnerable persons
- Immunization and Heath Record Form.?This form includes the following immunization requirements:, Two-step TB test, Immunity against measles, mumps and rubella, current tetanus, diphtheria immunization, current influenza immunization.
- Statement of Confidentiality Form, WSIB, and Workplace Agreement Form. These forms will be given to you to sign prior to your fieldwork placement.
- WHMIS

All costs associated with these requirements are the responsibility of the student.

For further information regarding field placement requirements for this program, please contact Carla Bumbaco either by email: <u>carla.bumbaco@saultcollege.ca</u> or by phone: 705-759-2554 ext. 2658.

## CERTIFICATIONS

Upon successful completion of the online Early Childhood Education Resource Consulting certificate program, students will obtain an Ontario College Graduate certificate.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1287-3 Supporting Atypical Development OEL1288-3 Adapting & Modifying Curriculum Practices OEL1289-3 Working with Others Through Professional Engagement OEL1290-3 Evidence Informed Decision-Making OEL1291-3 Empowering Families Through Strength-Based Approaches OEL1305-7 Introduction to Resource Consulting: Field Placement OEL1306-10 Field Placement II (ECE Resource Consulting)

## **Course Descriptions**

#### Semester 1

#### Supporting Atypical Development (OEL1287) (3 credits)

This course introduces students to early learning pedagogy and play-based strategies as the cornerstones of supporting children with special needs. Through a lens of curriculum principles that guide inclusive early learning programs, students will examine and analyze developmental characteristics of children in order to recommend program adaptations and modifications that build on children's strengths. In addition, students will utilize observation skills and screening tools in order to recommend centre policies and practices that promote meaningful and maximum early learning program participation.

#### Adapting & Modifying Curriculum Practices (OEL1288) (3 credits)

Students are introduced to the Family Service Plan as the consultation platform that integrates perspectives from families, early learning educators, health professionals and community services providers in order to adapt and modify curriculum practices. Students examine early learning environments and create a plan that recommends strategies, adaptations and modifications that promote the benefits of inclusive learning for children with special needs. In addition, students develop a proposal of how they plan to communicate this information to the full Family Service Team. This course highlights the importance of working in consultation with the whole team in order to support children.

#### Working with Others Through Professional Engagement (OEL1289) (3 credits)

Through a range of interactive, community-based learning opportunities, this course will examine methodologies and strategies to engage others in the consultation process to support families, early learning educators, and other community professionals. Students will apply adult learning principles to plan, deliver and evaluate educational opportunities for families, early learning educators and community professionals in supporting the healthy development of children living with diverse abilities. In addition, students will identify and critique organizational practices and create a consultation plan to engage stakeholders in the development of a shared philosophy of inclusion.

### Evidence Informed Decision-Making (OEL1290) (3 credits)

This course examines how research, current legislation, regulations, and ethical and professional standards impact evidence informed practices of resource consultants. Students assess a variety of observation and screening tools, family engagement models and learning strategies in order to understand child development and advise families and early learning educators. They utilize and reflect on professional knowledge and plan further learning related to teaching and inclusive practices.

### Empowering Families Through Strength-Based Approaches (OEL1291) (3 credits)

This course emphasizes the reciprocal partnership between the families of children living with diverse abilities and the service team within the community. Students will examine the structural, cultural, and developmental diversities of families in order to empower them as the primary support for their children's learning and development. Working in collaboration with the family and the service team, students will demonstrate strategies that engage in family-centred and strength-based decision making regarding the learning and development of the child. In addition, students will research community resources and learn to make referrals and advise families.

### Introduction to Resource Consulting: Field Placement (OEL1305) (7 credits)

This field placement experience introduces students to the work of ECE resource consulting. Building on prior skills and knowledge students examine current legislation, policies and evidence informed practices to reflect on how the roles of the RECE and ECE resource consultant complement each other to support children living with special needs. Students demonstrate collaborative professional practices as they promote and advocate inclusive policies and environments. In consultation with the service team, students select, administer and interpret observation techniques and screening tools in order to contribute to the Family Service Plan. In addition, they recommend program adaptations and modifications that demonstrate the principles of early learning pedagogy and inclusive play-based early learning practices, empower parents as decision-makers. Students reflect on the effectiveness of those strategies as well as on their own personal development as early childhood interventionists.Note: The facilitator in this course does not provide placement services, collect police/medical checks or provide affiliation agreements on behalf of students registered at colleges other than Seneca. With the support of the registering college all students should be ready at the start of the course to provide the facilitator with the agency name, location, contact name and the agreed upon hours/dates of placement. The facilitator will liaise with agency to conduct the students assessment.

## Field Placement II (ECE Resource Consulting) (OEL1306) (10 credits)

This field placement experience extends the students' understanding of the role of the ECE Resource Consultant. Working as a member of the service team, students act in accordance with legislative regulations, agency policies and professional standards. They will demonstrate family-centred strategies as they guide families to navigate potential supports and services and make recommendations that support the healthy development of children living with special needs. Through the use of reciprocal communication and evidence-informed practices, they will apply the principles of adult learning in order to co-ordinate and facilitate case management meetings, educational opportunities and referral discussions. They will reflect upon their consultation practices, evaluate strengths and challenges, and create a plan for further professional development.Note: The facilitator in this course does not provide placement services, collect police/medical checks or provide affiliation agreements on behalf of students registered at colleges other than Seneca. With the support of the registering college all students should be ready at the start of the course to provide the facilitator with the agency name, location, contact name and the agreed upon hours/dates of placement. The facilitator will liaise with agency to conduct the students assessment.

# Effective Business Writing

Section B.49 6/2/2020

Certificate (Part-time Distance Education ) (2027) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

The writing skills developed in traditional academic settings may not adequately prepare the individual for the real business world. Today's business environment is rapidly changing; the ability of the professional to relate his/her thoughts clearly, concisely and directly can be the key to career advancement. The goal of the Effective Business Writing Certificate is to:

- develop and refine business writing skills as a resource for the professional to meet the challenges of an evolving environment
- develop a professional who is a productive, confident, and effective communicator in the business world

The student will participate in a series of three core courses and two electives, all available online. The core elements will focus on building a foundation in English writing skills. The electives will introduce the student to the major styles of business writing through personal selection from areas of interest.

The Effective Business Writing Certificate is a part-time program that is offered online via distance education. You must have access to a computer, the internet and an email account. All courses are offered online via the internet. Online courses begin every January, May and September. Some courses are also offered starting each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

## **CAREER PATHS**

This certificate will be of interest to any person seeking to develop, refine or expand their business writing skills including but not exclusive to administrators, human resource professionals, business owners and operators, entrepreneurs and entry level personnel.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **PROGRAM OF STUDY**

SEMESTER 1 OEL1101-2 Communication (LDS) OEL453-3 Writing Grammatically OEL620-3 Business Writing Strategies Electives:

Choose **two** electives from the following:

- OEL380-2 Writing a Business Manual
- OEL391-2 Writing a Business Plan
- OEL708-2 Writing a Proposal
- OEL392-2 Writing a Marketing Plan
- OEL709-2 Writing Sales Material
- OEL817-4 Desktop Publishing for Business

## **Course Descriptions**

#### Semester 1

#### Communication (LDS) (OEL1101) (2 credits)

Communication skills are essential to all aspects of life but specifically this course will address business communications. With the various technology tools available and communication mechanisms today it is important to know what is available and what mechanism should be used to communicate which message. Managing the various communication channels today requires time management and effective informal and formal communication skills. This course will cover the communication styles, mechanisms and presentation skills facilitating meetings, social marketing and ways to improve all communications.

#### Writing Grammatically (OEL453) (3 credits)

This course explains the rules of English grammar in a comprehensive, easy-to-follow manner. Beginning with a review of parts of speech, the course provides an in-depth explanation of sentence structuring and culminates in a practical review of paragraphing.

#### Business Writing Strategies (OEL620) (3 credits)

Students develop practical writing skills using technology for successful communication in business. They learn how to compose business correspondence including emails, memoranda, letters, and reports, with a focus on routine, persuasive and negative messages. A review of grammar and mechanics is included.

## Engineering Technology Management

Section B.50 6/2/2020

**Ontario College Graduate Certificate (Part-time Distance Education ) (4085)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Engineering Technology Management certificate program is designed to expand the technical expertise of the graduate engineering technician or technologist. The program provides the essential academic content to develop meaningful skills required in supervisory roles for a wide variety of industrial settings.

Engineering Technology Management is a part-time certificate that is offered online, via the internet. Online courses begin every January, May and September. Some courses may be offered on a monthly basis.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

To participate in this program, you need to have a diploma from a recognized college as an Engineering Technician or Technologist.

## **CAREER PATHS**

Graduates may seek employment opportunities in areas such as scheduling, quality and production management, human resource planning and supervision. With added experience, opportunities exist for advancement to higher management and administrative positions.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1076-2 Creative & Critical Thinking (LDS) OEL1243-4 Human Resource Management Principles OEL149-3 Microeconomics - Introduction OEL470-3 Computer Applications in Quality Assurance OEL729-3 Intro to Business Management and Organizational Behaviour

#### **SEMESTER 2**

OEL142-3 Industrial Relations OEL233-3 Macroeconomics - Introduction OEL682-3 Strategic Leadership OEL683-3 Material and Operations Management OEL684-3 Fundamentals of Quality Assurance

## **Course Descriptions**

#### Semester 1

### Creative & Critical Thinking (LDS) (OEL1076) (2 credits)

Thinking is any mental activity that helps formulate or solve a problem, make a decision, or fulfill a desire to understand. Today more than ever, leaders need to be creative and critical thinkers in order to deal with all aspects of organizational, strategic and societal situations or environments. You will learn how to think creatively and critically and apply those skills to both professional and personal situations. For leaders, fine-tuning your creative and critical thinking skills will assist you in strategic planning, decision-making and problem solving.

### Human Resource Management Principles (OEL1243) (4 credits)

This course will cover the following topics: history of human resources management, economic and societal changes, job analysis and design, and human resource planning. As well, recruitment and selection, government and legal challenges, orientation and training, and financial incentives. Also, employee benefits and services, employee relations and practices, management development, career planning, work options, motivation, and performance appraisal and the Union-Management framework.

#### Microeconomics - Introduction (OEL149) (3 credits)

This course introduces the student to the principles that are essential to an understanding of contemporary microeconomic issues. Emphasis is placed on the use of economic models to analyze economic developments accurately and objectively. Students will examine the role of prices and competitive markets in the allocation of resources, firm behaviour and market structures; as well, they will evaluate the effects of government intervention in the economic marketplace.

#### Computer Applications in Quality Assurance (OEL470) (3 credits)

The student will be introduced to the computerization of statistical process control functions such as histograms, control charts and data collection. This course uses spreadsheets, word processing and other quality assurance related software to demonstrate how computers can be used to effectively manage a quality system.

#### Intro to Business Management and Organizational Behaviour (OEL729) (3 credits)

An examination of the Canadian business environment and the management decision making process as an integral component of organizational behaviour.

#### Semester 2

#### Industrial Relations (OEL142) (3 credits)

This course is designed to assist students in understanding the theory and practice of industrial relations in Canada. Students examine the environmental influences that affect union-management relations, appreciate the complex combination of power, reason, communications, politics, and attitudes that pervade industrial relations processes, and explore bargaining issues and their economic implications. This course also explores essential elements of the collective bargaining process, strategies at the bargaining table, and administration of the collective agreement, grievances and arbitration.

#### Macroeconomics - Introduction (OEL233) (3 credits)

Knowledge of contemporary macroeconomic issues is essential to understanding the world we live in. Students investigate fundamental macroeconomics principals with an emphasis on the use of economic models to analyze economic developments accurately and objectively. Through a combination of instruction and practical application, students examine unemployment, inflation and economic growth as well as evaluate government use of fiscal and monetary policy in dealing with these key macroeconomic issues. In addition to this, Canada's international economic relationships are explored. Individual assignments and formal examinations are used toassess student knowledge of key objectives.

#### Strategic Leadership (OEL682) (3 credits)

In this course, students will develop leadership, management, and human resources skills to establish and maintain strategic alliances within an organization. Students will recognize the importance of ethics to conduct business at both national and international levels.

## Material and Operations Management (OEL683) (3 credits)

Operations managers make tactical decisions in support of carrying out the vision and strategies for businesses in the supply chain and/or in service production. Students gain in-depth knowledge of the responsibilities and current tools of operations and supply chain managers in manufacturing and non-manufacturing organizations. Topics include project management, Operations managers make tactical decisions in support of carrying out the vision and strategies for businesses in the supply chain and/or in service production. Students gain in-depth knowledge of the responsibilities and current tools of operations and supply chain managers in manufacturing and non-manufacturing organizations. Topics include project management, quality management, layout management, location, inventory management, MRP and ERP and JIT/Lean.

## Fundamentals of Quality Assurance (OEL684) (3 credits)

This course provides an introduction to quality assurance and control programs within a business organization. Topics include the nature and history of quality, factors which affect quality, quality inspection and verification. The course will also deal with collection, and analysis and interpretation of data, histograms and frequency distributions, probability and its applications, normal and binomial curves, control charts for variables and attributes and statistical sampling.

# Financial Technology

#### Certificate (2125)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## Section B.51 6/2/2020



## **PROGRAM OVERVIEW**

Financial Technology (FinTech) refers to the rapidly growing application of technology and innovation to traditional banking and financial transactions.

The Financial Technology Certificate provides cutting-edge training on FinTech application areas such as basic retail banking (mortgages, deposits), payments systems, financial management, commercial and corporate banking, investment banking and capital markets, insurance, commodities and even global currencies.

This program will be of interest to individuals who have previous education or experience in finance, business, information technology, cyber security or related areas. Topics covered include big data; legal and ethical issues in information technology; the intersection of technology and commerce; the associated implications for competitive dynamics, social policies and regulatory frameworks; blockchain technology in the banking and financial service industries; and the latest trends and technologies in FinTech including artificial intelligence.

Students will complete the following four compulsory courses:

- OEL1347 Introduction to Financial Technology
- OEL1348 Blockchain: Origins and Applications
- OEL1349 Artificial Intelligence in Finance
- OEL1350 Innovative Financial Systems

Students will chose to complete one of the following elective courses:

- OEL1351 Data Analysis Tools for Analytics
- OEL1352 Introduction to Data Analysis
- OEL1353 Visualization, Leadership and Business Communication 1
- OEL1354 Big Data Tools
- OEL678 Excel Expert

#### **PROGRAM OUTCOMES**

Graduates will be able to:

- Identify the various AI and Machine Learning technologies and applications employed by the banking and financial services industries.
- Identify the various blockchain technologies and applications employed by the banking and financial services industries.
- Describe the impact of AI, Machine Learning, and blockchain technologies on the banking and finance industries with respect to traditional business practices and productivity, customer acquisition and retention and regulatory and compliance functions.
- Describe real-world use cases of FinTech and their impact on the Financial Services industry

- Evaluate the impact of AI and Machine Learning on banking and finance in society and the regulatory framework.
- Propose potential future developments in AI and Machine Learning and their implications for the future of the banking and finance industries.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

- Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older
- Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate
- Students are recommended to have completed Grade 12 U or C Math (e.g. MCT4C)prior to registering in the program.

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## **CAREER PATHS**

This new program will enable students to gain an understanding of the emerging technologies and applications that are redefining traditional financial markets. Developments in this field have a profound impact on almost all areas of commerce, financial management and economic and monetary policies.

Graduates may find positions in a variety of careers such as:

- banking and lending
- wealth management advising
- mutual funds
- insurance
- financial analysis
- technology
- data analysis and management

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca.</u>

## **CERTIFICATIONS**

Upon successful completion of the online Financial Technology certificate program, students will obtain a Sault College certificate.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1347-3 Introduction to Financial Technology OEL1348-3 Blockchain: Origins and Applications OEL1349-3 Artificial Intelligence in Finance OEL1350-3 Innovative Financial Systems

#### **Electives:**

Learners must complete one elective of their choosing from the list below:

- OEL1351 Data Analysis Tools for Analytics
- OEL1352 Introduction to Data Analysis
- OEL1353 Visualization, Leadership and Business Communication
- OEL1354 Big Data Tools
- OEL678 Excel Expert

## **Course Descriptions**

#### Semester 1

#### Introduction to Financial Technology (OEL1347) (3 credits)

This course provides an introductory overview of the major themes and issues in Financial Technology (FinTech). FinTech is a broad term used to refer to a rapidly growing application of technology and innovation to traditional banking and financial services industries. Students will develop a broad understanding of the role banking and financial services play in society and the importance of key FinTech applications. Significant emphasis is placed on understanding the practical implications of the adoption of FinTech on traditional business practices, employees, customers and the impact on society and the regulatory environment.

#### Blockchain: Origins and Applications (OEL1348) (3 credits)

This course expands on concepts introduced in Introduction to FinTech with an in-depth investigation of the use of blockchain technology in the banking and financial service industries. Students will develop a comprehensive understanding of the origins of blockchain, the technological principals which underpin the system and the various practical applications for blockchain technology, including, but not limited to, cryptocurrencies. The course will review the important impacts that the adoption of blockchain may have on traditional business practices as well as society and the regulatory environment. The course provides students with the comprehensive knowledge to enable them to assess and evaluate the use of blockchain technology in industry and business applications.

#### Artificial Intelligence in Finance (OEL1349) (3 credits)

Students study the growing applications of Artificial Technology (AI) and big data in the world of banking and finance. The class covers various applications including marketing, credit decision/underwriting and asset investment/advisory and their impact on retail banking and wealth management. The course addresses the wide ranging legal and social issues around the growing use of AI and data collection.

#### Innovative Financial Systems (OEL1350) (3 credits)

Students learn about the many implications of virtual banking and financial networks on regional and global financial networks. Topics include discussions of the evolution of traditional banking networks and marketing and the competitive threats and opportunities posed by new entrants/disruptors with a review of developments across a range of countries.

## Food Service Worker

**Certificate (Part-time Continuing Education ) (1073)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## Section B.52 6/2/2020



## **PROGRAM OVERVIEW**

The Food Service Worker program at Sault College provides the student with the knowledge and skills to be an effective member of a food service team. The program covers food preparation, service, nutrition, sanitation practices, customer service, communications and business skills.

The program includes practical fieldwork experience for those individuals without previous training in an institutional setting or job training in food service operation.

Most courses are offered online via the internet. Online courses begin every January, May and September. The Fieldwork course (FSW105) is available as independent study, anytime.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

## **CAREER PATHS**

Graduates of the program may seek employment as a Food Service Worker in a commercial, institutional or long term care facility. Potential positions exist in nursing homes, homes for the aged, retirement homes, rest homes, special care homes, hospitals, residential hospice, residential group home facilities and other integrated care facilities.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **CLINICAL/LAB OR FIELD PLACEMENTS**

If you have successfully completed a program such as Culinary Management or Culinary Skills - Chef Training, you may be eligible for exemption from some courses.

If you are currently employed as a food service employee in a long term care institution OR have completed at least 1 year equivalent of full time employment in the past 5 years, you may be eligible for exemption from the Fieldwork course. You will be required to provide proof of hours worked from your employer.

Fieldwork experience provides the student with the opportunity to apply classroom theory to an actual employment situation. Students with experience in the food servicefield may apply for prior learning

assessment (PLAR).

All applicants with be required to submit documentation of having completed the following procedures prior to entering clinical/lab, identified courses and/or field placement components of the program. If the appropriate documentation is not received with at least two weeks before the start of the identified clinical/lab/course and/or field placement, it may be necessary to withdraw the student from the course.

- A current (within six months) Police Record Search. This is required by students as they are enrolled in a program during which they will have unsupervised access to vulnerable persons
- Immunization and Heath Record Form. This form includes the following immunization requirements:, Two-step TB test, Immunity against measles, mumps and rubella, current tetanus, diphtheria immunization, current influenza immunization.
- Statement of Confidentiality Form, WSIB, and Workplace Agreement Form. These forms will be given to you to sign prior to your fieldwork placement.

• WHMIS.

All costs associated with these requirements are the responsibility of the student.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

FSW105-4 Fieldwork for Food Service Worker OEL1072-2 Quantity Food Preparation OEL1217-3 Institutional Food Service OEL1218-3 Introduction to Nutrition OEL1219-3 Sanitation and Safety OEL390-3 Nutrition in Health Care

## **Course Descriptions**

#### Semester 1

#### Fieldwork for Food Service Worker (FSW105) (4 credits)

The final step to complete the Food Service Worker Certificate is the practicum. This necessary practicum will provide you with the opportunity to practice the skills and knowledge from prior Food Service Worker courses. The practicum requires 75 hours of work experience within an institutional food service environment. The course will provide experience in the preparation and serving of all daily meals. If you have work experience in institutional food services, you may be eligible for exemption from FSW105. You will be required to provide a letter from your employer to verify your work experience.

#### Quantity Food Preparation (OEL1072) (2 credits)

This course focuses on the cooking principles and methods for preparing food in large quantities. In addition, the nutritional components of each food will be reviewed to ensure students are aware of the quality and nutritional values of various foods, and methods for maintaining nutrition throughout food preparation and service. Various food types will be examined including meat and alternates, bakery products, cold prepared items, egg and cheese recipes, milk products, soups, stocks and sauces. Major cooking equipment will also be discussed.

#### Institutional Food Service (OEL1217) (3 credits)

This course focuses on the food service worker's role in various food service systems in a health care environment. These systems include food service department organization, food production and delivery systems, food ordering and receiving systems, cost controls, quality improvement, and computerization.

#### Introduction to Nutrition (OEL1218) (3 credits)

This course introduces students to the basic principles of nutrition and the role of nutrition in the health care environment. Current nutrition recommendations for fat, fibre, vitamins and minerals, and weight control will be discussed. Special considerations for nutrition throughout the lifecycle will also be explored.

#### Sanitation and Safety (OEL1219) (3 credits)

Focus on preventing food-borne illness within the health care institutional setting. Course addresses special regulations and acts governing food service and strategies involved in proper food handling and control of contamination. Emphasis also on food safety, and quality assurance programs such as HACCP. Safe working environments for the FSW are explored including fire safety, managing safety hazards, prevention of common injuries, and an introduction to first aid.

#### Nutrition in Health Care (OEL390) (3 credits)

This course focuses on the basic principles of diet therapy. Several therapeutic diets are discussed, as well as tube feedings and commercial preparations.

# French Language (Online)

Section B.53 6/2/2020

Certificate (Part-time Continuing Education ) (1219) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

Enhance your communications skills (reading, writing and speaking) so that you can communicate effectively and with confidence. You will also further your knowledge of grammar and develop an appreciation of French culture. Whether you require knowledge of French for your career or enjoy vacationing in French-speaking countries, you will find this program very effective.

All courses are offered online via the internet. Online courses begin every January, May and September. Some courses are also offered starting each month.

This program is available on a course by course basis. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C or mature student status.

## **CAREER PATHS**

A review of the Services Canada job board for Ontario reflects the need for bilingual applicants in both public (federal and provincial) and private sectors. There is significant demand in positions requiring interaction with the public (customer service, sales, travel, and hospitality), teaching, healthcare, business, office/clerical, human resources, social services and IT. Positions are not restricted to any one geographic area however there is demand particularly in Eastern and Northern Ontario.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca</u>

## **OTHER INFORMATION**

- All course requirements must be completed within 5 years.
- Overall average of 60% or a GPA of 2.0
- A minimum of 25% of courses must be completed through Sault College

#### Prior Learning Assessment (PLAR)

Ontario Secondary School Diploma students who have successfully completed, within the last four years, French grades 9-12 or OAC, Academic or Open level international language program, may be credited with levels 1 and 2 of Sault Colleges French Language Online courses. These courses may be credited upon receipt of your OSSD and an official transcript from your High School.

Students who have successfully completed Sault Colleges FRN101 and FRN102 within the last 5 years may be credited with levels 1 and 2 of the French Language Online courses.

Students with other credentials may be eligible for Prior Learning Assessment and should contact Student Services.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1058-3 French Ecrit OEL700-3 French 1 OEL701-3 French 2 OEL702-3 French 3 OEL703-3 French 4 OEL704-3 French 5

## **Course Descriptions**

#### Semester 1

#### French Ecrit (OEL1058) (3 credits)

The aim of this course is to expose you to the most important written structures of the French Language. You will be able to apply proper grammar rules and to spell a wide range of vocabulary accurately and effectively. This is the final course in the French Proficiency certificate.

#### French 1 (OEL700) (3 credits)

The objective of this course is to enable the student to gain confidence in the knowledge and application of the French language by using simple structures and vocabulary. In this introductory level the student will learn to express physical, emotional and personality attributes as well as how to formulate basic questions to obtain this information. At the end of this course the student will have some knowledge of present verb tenses. The reading of short articles brings to light family life in a French culture, the customs and activities related to family celebrations in Canada and around the world.

#### French 2 (OEL701) (3 credits)

The student will sustain development of language skills by extending vocabulary with regard to all activities after work such as weekend chores, leisure, sports including holidaying abroad. The grammatical structures at this level continue to be simple. Through systematic exercises the student becomes more confident and moves on from level 1 present tense and near future to the past tense. The student at the end of this level will be able to share more extensively life at home as well as describe a real or imagined past holiday in a French speaking country.

#### French 3 (OEL702) (3 credits)

The progressive acquisition, reinforcement, and creative use of language structures will give the student confidence to self-expression. By analyzing, comparing and applying the French past tenses, the student will have the basic tools to storytelling. At this level, the student will be encouraged to express simple and complex sentence structures. Anecdotes by authors from French speaking Canada will serve as models for the final task.

#### French 4 (OEL703) (3 credits)

In addition to a more rigorous approach to vocabulary and grammatical structures with every class the student will continue to develop everyday situations practiced at earlier levels. Grammatical sentence structures are more complex at this level with the expansion of the past, present, future and conditional verb tenses. Articles from French speaking Canada serve as language models and provide a cultural perspective on current issues. Towards the end of the course language skills include the ability to convey necessity, obligation, probability, and or expectation with regards to past experiences, work and education

and the future.

#### French 5 (OEL704) (3 credits)

The objective of this course is to expand vocabulary skills through exposure of the diversity of the French language. This is done with the support of literary, political, social and cultural articles from the French speaking world. At this level grammatical and sentence structures are interesting and complex. At the end of this course the student will have discussed and researched current affairs of French speaking Canada, given an opinion, given advice; expressed regret to hypothetical actions in the past, as well as applied verb tenses that establish sequential order to past actions.

## Health Office Administrative Support

Section B.54 6/2/2020

Certificate (Part-time Continuing Education ) (3026) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

Health office personnel requires strong organizational skills and the ability to maintain an orderly flow of information. If you have an interest in health care, enjoy paperwork and are excited at the notion of becoming fluent in the language of health and medicine, then you may be headed for a new career as a Health Office Administrative Support person.

Thisis a part-time program that is offered online via the internet, while the final course (HOA107) is offered via independent study and can be started at any time. Online courses begin every January, May and September. Some online courses begin each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

## **CAREER PATHS**

Employment settings include hospitals, physician's offices or other healthcare facilities; insurance or health maintenance organizations. Graduates of the Health Office Administrative Support Certificate program are employed as health office personnel such as unit clerk, receptionist or office assistant.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **CLINICAL/LAB OR FIELD PLACEMENTS**

Fieldwork experience provides the student with the opportunity to apply classroom theory to an actual employment situation. Students with experience in the health office field may apply for prior learning assessment (PLAR).

All applicants with be required to submit documentation of having completed the following procedures prior to entering clinical/lab, identified courses and/or field placement components of the program. If the appropriate documentation is not received with at least two weeks before the start of the identified clinical/lab/course and/or field placement, it may be necessary to withdraw the student from the course.

- A current (within six months) Police Record Search. This is required by students as they are enrolled in a program during which they will have unsupervised access to vulnerable persons
- Immunization and Heath Record Form. This form includes the following immunization

requirements:, Two-step TB test, Immunity against measles, mumps and rubella, current tetanus, diphtheria immunization, current influenza immunization.

- Statement of Confidentiality Form, WSIB, and Workplace Agreement Form. These forms will be given to you to sign prior to your fieldwork placement.
- WHMIS.

All costs associated with these requirements are the responsibility of the student.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I HOA104-3 Processing Physicians Orders HOA106-2 Medical Office Billing HOA107-4 Health Office Fieldwork HOA108-3 Health Office Keyboarding HOA109-4 Health Office Foundations HOA110-3 Understanding Pharmacology and Medical Tests HOA111-3 Computers in the Health Office **Note:** HOA111 online substitutes are MS Office 2010 (OEL1200) **or** MS Office 2013 (OEL1138). Choose the course that matches your computer software. MED111-3 Medical Terminology

## **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Processing Physicians Orders (HOA104) (3 credits)

Students learn how to interpret information on Physicians orders including medication dosages, modes of administration and frequencies. The course teaches students about the Health Office Administrative Support role in processing orders and recording orders. Students learn how to transcribe these orders through hands on simulations, using doctors orders. Topics covered include: types of orders, use of abbreviations and acronyms, components of a medication order and solving problems with the orders (case studies). At the end of the course, students will be able to demonstrate the knowledge and skills to transcribe orders.

#### Medical Office Billing (HOA106) (2 credits)

This course is designed to provide the student with the fundamentals of learning to be able to apply basic principles of health claim billing. Students will develop an understanding of the Ministry of Health (Ontario) Schedule of Benefits to complete precoded health claim cards for manual billing and reconciliation of accounts

#### Health Office Fieldwork (HOA107) (4 credits)

This course is designed to give students broad knowledge of the roles and responsibilities of the persons working in health offices; specifically in support positions and the variety of health care services available. Students will be required to complete a written assignment and share their experience in a group setting.

## Health Office Keyboarding (HOA108) (3 credits)

This course is designed to familiarize the user with beginning medical keyboarding, advanced keyboarding, medical language, grammatical and office skills. This course is not intended to be a learn to type course. It includes case histories, a variety of medical reports, technical terminology and timed writings. These exercises will help the learner increase their knowledge of terms they will encounter on-the-job, and will improve their keyboarding speed and accuracy. A very brief introduction to Medical Transcription is included.

## Health Office Foundations (HOA109) (4 credits)

This course focuses on personal and organizational skills required by persons employed in health care in an office or clerical assistant role. It examines the health record as it is used in health care organizations with a major emphasis on confidentiality and the legal aspects of health information documentation. You will learn to effectively carry out the role of assisting with administration while in the employment of a nursing unit or health care office. Assignments provide realistic practical experiences by performing a variety of tasks designed to develop sound decision-making skills and critical thinking skills.

## Understanding Pharmacology and Medical Tests (HOA110) (3 credits)

This course has been designed to support medical office personnel to develop a basic understanding of a) pharmacology and b) medical tests. Content has been developed to guide you through the various body systems using a modular based approach.

## Computers in the Health Office (HOA111) (3 credits)

This course will familiarize students with both hardware and software of their computer system. Successful graduates will be able to use the most common functions of Windows operating system including Windows Explorer program for file management. Students will review networks, internet and email use, as well as build, properly navigate Outlook and produce formatted documents using Microsoft Word and spreadsheets with Microsoft Excel.

## Medical Terminology (MED111) (3 credits)

This basic course will focus on the anatomical structure and function of the human body and related terminology used to describe body parts, structure and function. Related terminology will also include general or symptomatic terms, diagnostic terms, surgical procedures and abbreviations.

## Human Resources Practices

**Ontario College Certificate (Part-time Distance Education ) (2110)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

A career in human resources involves helping an organization manage its people. This includes a wide range of activities including hiring and terminating, training, compensation, administering benefits and many other issues. This is an exciting career area. An effective human resources department finds the employees who are the best fit for a given position, which results in giving the company a competitive advantage. Sault College's Human Resource Practices Certificate gives you the tools to launch your career in human resources. The courses within this Certificate also provides you with the opportunity to gain a national designation from Human Resource Professional Association (HRPA) and Certified Human Resource Professional (CHRP).

All courses are offered online via the internet. Online courses begin every January, May and September. Some courses are also offered starting each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

## **CAREER PATHS**

Graduates find employment in human resources departments.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **CERTIFICATIONS**

Successful completion of the ten Sault College courses will earn you a Sault College Human Resource Practices Certificate. These courses are also accepted by Human Resource Professionals Association (HRPA) - Certified Human Resource Professional (CHRP). There may be other requirements beyond the courses that you will need to investigate. More information can be found at <u>www.hrpa.ca</u>.

## **OTHER INFORMATION**

For graduates of Business Diploma and Degree programs and possibly others, advanced credit standing is a possibility. Should you wish courses to be evaluated for equivalencies, forward your request to the Continuing Education Office.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1024-3 Accounting Basics I OEL1068-4 Training and Development OEL1243-4 Human Resource Management Principles OEL125-3 Occupational Health & Safety OEL135-3 Compensation Management OEL142-3 Industrial Relations OEL398-3 Financial Management Accounting, Intro OEL605-3 Human Resource Planning and Development OEL729-3 Intro to Business Management and Organizational Behaviour OEL735-3 Recruitment and Selection

## **Course Descriptions**

#### Semester 1

#### Accounting Basics I (OEL1024) (3 credits)

This course introduces the student to how accounting information is used by, and meets the needs of both internal and external users through effective and efficient communication as well as what accounting information is required by a business concern to reflect clearly the operating results of the enterprise over its operating life. Throughout the course, students will be introduced to generally accepted accounting principles, the interpretation and preparation of financial statements and how this information is recorded in the various business records.

#### Training and Development (OEL1068) (4 credits)

You will be introduced to the psychology of the learning process on which training and development is based and will gain an understanding of the design, implementation, and evaluation of training programs within organizations. The four key elements of the training and development function: needs analysis procedures; program design/development; program administration; and measurement and evaluation will be included.

#### Human Resource Management Principles (OEL1243) (4 credits)

This course will cover the following topics: history of human resources management, economic and societal changes, job analysis and design, and human resource planning. As well, recruitment and selection, government and legal challenges, orientation and training, and financial incentives. Also, employee benefits and services, employee relations and practices, management development, career planning, work options, motivation, and performance appraisal and the Union-Management framework.

#### Occupational Health & Safety (OEL125) (3 credits)

This course introduces participants to the broad and ever-changing field of occupational health and safety, an inherently technical subject area. The multiple dimensions of the various issues-technical, legislative, political, and personal-are a required part of the training for a professional in this field or for someone who is involved with this kind of operation. Major topic areas include the Occupational Health and Safety Act, WCB, WHMIS, transportation of dangerous goods, accident prevention and investigation, physical and biological agents, and the management of Occupational Health and Safety programs.

#### Compensation Management (OEL135) (3 credits)

This course provides the student with the foundation of the reward systems found in all organizations, whether profit or not-for-profit. The course examines both the theoretical and applied aspects of the compensation function, with special consideration of the major factors that influence the actual design of a

#### compensation system.

#### Industrial Relations (OEL142) (3 credits)

This course is designed to assist students in understanding the theory and practice of industrial relations in Canada. Students examine the environmental influences that affect union-management relations, appreciate the complex combination of power, reason, communications, politics, and attitudes that pervade industrial relations processes, and explore bargaining issues and their economic implications. This course also explores essential elements of the collective bargaining process, strategies at the bargaining table, and administration of the collective agreement, grievances and arbitration.

#### Financial Management Accounting, Intro (OEL398) (3 credits)

Learn financial and management accounting concepts and techniques, focusing on the relationships between management of performance and basic management functions of planning, coordination, and control. It is recommended that you have a basic knowledge of accounting before taking this course.

#### Human Resource Planning and Development (OEL605) (3 credits)

Learn how to forecast the human resource needs of an organization within ambient socio-political situations.

#### Intro to Business Management and Organizational Behaviour (OEL729) (3 credits)

An examination of the Canadian business environment and the management decision making process as an integral component of organizational behaviour.

#### Recruitment and Selection (OEL735) (3 credits)

A basic study is undertaken of the principles, issues, trends, and legislative requirements affecting recruitment and selection. Human Resources professionals need an understanding of how recruitment and selection fits into the broader organizational structure, processes, and goals of an organization and how this function is related to the other functions of Human Resources management. Students will acquire the knowledge and skills needed to successfully identify human resource requirements and attract and retain an effective workforce for an organization. The changing legal environment and the impact of laws on recruitment and selection are an important component of this course.

## Instructional Design

#### Certificate (1224)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This online certificate is designed for students interested in the theory, practice, and design of instructional content for various modes of delivery (e.g. in-person, online, or hybrid). Learners will gain the theoretical knowledge and practical skills required to design and develop instruction and/or training for a variety of fields including higher education and corporate training. This program is delivered fully online and will allow students to analyze the requirements, design elements, and structure of courses built using the instructional design principles they will be learning.

### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older

Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate

Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate

## **CAREER PATHS**

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## CERTIFICATIONS

Upon successful completion of the online Instructional Design certificate program, students will obtain a Sault College certificate.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1307-3 Instructional Design Principles OEL1308-3 Digital Pedagogy OEL1309-3 Course Design for Hybrid Learning OEL1310-3 Alignment and Assessment Strategies OEL1311-3 Instructional Design for Online Learning OEL1312-3 Quality Assurance and Course Evaluation OEL1313-3 Project Management for Instructional Designers OEL1314-3 Collaborative Framework: Working with Subject Matter Experts

## **Course Descriptions**

Semester 1

#### Instructional Design Principles (OEL1307) (3 credits)

This course explores the foundational principles of instructional design including learning theories and pedagogical models that are commonly used in the instructional design process. The student will write and align measurable learning outcomes with curriculum and ensure course content is compliant with current industry design and accessibility standards.

#### Digital Pedagogy (OEL1308) (3 credits)

Digital pedagogy deals with not only the use of technology, but the appropriate use of technology to enhance the learning experience and engage the learner. This course will prepare students to evaluate, recommend and implement digital tools in a face to face, online, or hybrid environment.

#### Course Design for Hybrid Learning (OEL1309) (3 credits)

This course will prepare students to design a hybrid module from start to finish. Important issues on mixed-mode lesson planning are discussed as well as learning strategies geared towards both face to face and online delivery. Assessment strategies for hybrid delivery are also key to the design process and we will explore best practices for assessment creation and alignment.

#### Alignment and Assessment Strategies (OEL1310) (3 credits)

Design backward and build forward is an important instructional design principle. This course will explore the importance of aligning assessments to course and module outcomes. Activities and exercises which scaffold to the formative or summative assessments are discussed. The course also speaks to how to use quizzes and pre or post assessments effectively by keeping an eye to instructional design principles.

## Instructional Design for Online Learning (OEL1311) (3 credits)

This foundational course introduces the student to current learning, instructional design theories, and models used to guide the effective design of online learning environments. The student will analyze learning needs of their target audience/learner profiles/ learner analysis and develop a design plan for a specific instructional approach

#### Quality Assurance and Course Evaluation (OEL1312) (3 credits)

A successful learning experience comes not only from proper curriculum and instructional design but also adhering to quality assurance protocols. In this course students explore a variety of quality assurance protocols as they apply to course development. The concept of piloting to gather students and instructor feedback is also discussed.

#### Project Management for Instructional Designers (OEL1313) (3 credits)

Instructional design involves managing not only the design of curriculum in order to meet learning outcomes but also managing time requirements and other tangible and intangible resources. This course explores the important concepts in project management specifically for educational design and development. We look at time management and cost control, conducting a proper needs analysis from an institutional level as well as strategies for determining scope.

#### Collaborative Framework: Working with Subject Matter Experts (OEL1314) (3 credits)

This course will explore the roles and scope of the instructional designer and subject matter expert in the framework of an instructional design project. Students will develop effective conflict resolution strategies as well as interpersonal communication skills. Communication skills to provide feedback and drive course revisions will also be covered.

## Language Interpreter

**Certificate (Part-time Distance Education ) (2034)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Language Interpreter Certificate is designed for **bilingual** individuals who wish to work as spoken language interpreters in the legal, health care, social service and domestic violence prevention sectors in Ontario. Integrating theory, principles and concepts with practical application and skills development, the program aims to assist individuals in developing the introductory level competencies, skills, knowledge and attitudes required for proficient practise as language interpreters. This program incorporates essential employability skills, the fundamental, personal management, and teamwork skills necessary to get, keep, and progress in a job-of-choice, or to enter further postsecondary studies.

This 180-hour program provides an introduction to spoken language interpreting, with skills development practise in the major constituent tasks of interpreting, consecutive interpreting, sight translation and note taking, simultaneous interpreting, and a focus on setting-specific interpreting. The final 30-hour capstone course concentrates on the integration of all these skills in typical settings encountered by spoken language interpreters. This final course also incorporates a module that addresses some of the competencies required to operate a small business. Participants who successfully complete the program will demonstrate compliance with the Standards of Practice and Ethical Principles and an ethical code appropriate to the language interpreting profession. This program also incorporates essential employability skills, the fundamental, personal management and teamwork skills necessary to get, keep and progress in a job-of-choice, or to enter further postsecondary studies.

## This program is intended for individuals who have written and oral fluency in English and a second language.

This introductory 180 hour program is comprised of six 30-hour modules delivered online. Courses start January, May and September. This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

You must be bilingual. Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

## **CAREER PATHS**

Spoken language interpreters are required in the legal, health care, social service and domestic violence prevention sectors in Ontario. The program will benefit individuals who wish to seek a career in interpreting, as well as those already working as interpreters who wish to upgrade their skills and obtain a college certificate.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca</u>

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL755-2 Language Interpreter - Sight Translation OEL756-2 Language Interpreter - Simultaneous OEL762-2 Introduction to Spoken Language OEL763-2 Capstone Course, Skills Integration OEL784-2 Consecutive Interpreting OEL790-2 Setting Specific Interpreting

## **Course Descriptions**

#### Semester 1

#### Language Interpreter - Sight Translation (OEL755) (2 credits)

Sight translation, sometimes referred to as sight interpretation, is a hybrid of interpreting and translation. Using documents related to a number of different settings, the course will instruct participants in the fundamentals of sight translation and assist in the development of related skills, such as reading comprehension, scanning for main ideas, fast reading, analysis of language, vocabulary enrichment and comprehension verification through paraphrasing. Students will also develop skills to manage ethical and performance challenges in sight translation.

#### Language Interpreter - Simultaneous (OEL756) (2 credits)

Simultaneous interpreting provides an immediate interpretation of speeches and dialogues. Through simulations, role plays and audio/visual exercises participants will develop skills in simultaneous interpreting without the use of electronic equipment. Subsequent to the theory overview, participants will practice: active listening, shadowing, retelling, paraphrasing, note taking, memory exercises and self-evaluation. Based on exposure to exercises and simulations, participants will develop and practice entry-level skills and techniques used in simultaneous interpreting in various settings and contexts.

#### Introduction to Spoken Language (OEL762) (2 credits)

Introduction to Spoken Language Interpreting is the first course of a six course Language Interpreter program. This course presents the fundamentals of providing spoken language interpreting services in various settings. You will consider the role and responsibilities of the interpreter and discuss professional standards of practice and ethical principles to guide an interpreter's performance. The course also provides an introduction to various skills required for successful interpreting including note taking, active listening, memory retention, mental transposition and verbalization in the target language.

#### Capstone Course, Skills Integration (OEL763) (2 credits)

The skills of consecutive interpreting and note taking, sight translation and simultaneous interpreting are practiced in preparation for this course's major component - the integration of interpreter skills and competencies through the Comprehensive Case Studies Method. The final module deals with professional comportment issues and some of the financial management skills required for the interpreter who works as an independent contractor.

#### Consecutive Interpreting (OEL784) (2 credits)

Consecutive Interpreting is the second course of the six course Language Interpreter Certificate Program. Following a brief overview of the theoretical framework underlying the process of consecutive interpreting, the course concentrates on the development of skills essential to the task of effective interpreting including: memory and comprehension, note taking, vocabulary building, and handling linguistic and ethical challenges assertively.

## Setting Specific Interpreting (OEL790) (2 credits)

The course concentrates on the acquisition of knowledge and the enhancement of skills introduced in previous courses in preparation for interpreting in different settings. Four interpreting settings are introduced and explored; court interpreting, interpreting with child victims/witnesses; health care interpreting; and interpreting in the violence against women sector. Protocols, procedures and techniques necessary for functioning effectively as an interpreter are reviewed and discussed, forming the basis for problem solving exercises. A variety of articles and accompanying self-study and terminology development activities enrich the course. Research and field observation provide context for course content. Skill and knowledge development and assessment are supported by role plays and case scenarios.

## Leadership Development Series

Section B.58 6/2/2020

Certificate (Part-time Distance Education ) (1275) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

Developed and administered in association with Ontario's community colleges, leading business and industry professionals, this new college certificate will enhance leadership skills and develop new skills to help you meet career and organizational objectives.

The program will provide you with a solid foundation if you are looking to enter leadership positions or are currently in a front line or middle management position.

The program builds on your existing skills and experience and provides opportunity to apply those skills to workplace situations.

All courses are offered online via the internet. Online courses begin every January, May and September.

Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

## **CAREER PATHS**

The Leadership Development Series Certificate is intended for persons who have employment experience and are planning towards or currently working in a leadership role.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca</u>.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1052-2 Employment Law (LDS) OEL1076-2 Creative & Critical Thinking (LDS) OEL1079-2 Project Management (LDS) OEL1080-2 Performance Management (LDS) OEL1101-2 Communication (LDS) OEL1109-2 Managing Change (LDS) OEL1110-2 Human Relations (LDS) OEL1111-2 Leading Responsibly (LDS)

## **Course Descriptions**

#### Semester 1

#### Employment Law (LDS) (OEL1052) (2 credits)

Today's workplace is highly regulated from the commencement of the employment relationship through to its termination. An examination of both statutory law and common law will be undertaken in both federal and provincial jurisdictions. Students will review employment standards, health and safety, labour relations, pay equity and human rights legislation as it applies to management and unionized employees and leaders.

## Creative & Critical Thinking (LDS) (OEL1076) (2 credits)

Thinking is any mental activity that helps formulate or solve a problem, make a decision, or fulfill a desire to understand. Today more than ever, leaders need to be creative and critical thinkers in order to deal with all aspects of organizational, strategic and societal situations or environments. You will learn how to think creatively and critically and apply those skills to both professional and personal situations. For leaders, fine-tuning your creative and critical thinking skills will assist you in strategic planning, decision-making and problem solving.

## Project Management (LDS) (OEL1079) (2 credits)

Leadership today involves all aspects of an organization and multiple skills, duties and responsibilities. This course is designed to meet the needs of leaders in any organization who may be new to project management or who have not had formal project management training. This course provides the practical knowledge to start and complete a project successfully from a leadership perspective. You will learn how the elements of the Project Management Body of Knowledge are applied during each phase of a project's life cycle and the implications of project management on leadership within an organization. This will help establish priorities and effectively manage your projects and project teams.

#### Performance Management (LDS) (OEL1080) (2 credits)

This subject will focus on performance analysis, counseling, constructive feedback, conflict resolution, performance management systems and overall strategies for performance management.

#### Communication (LDS) (OEL1101) (2 credits)

Communication skills are essential to all aspects of life but specifically this course will address business communications. With the various technology tools available and communication mechanisms today it is important to know what is available and what mechanism should be used to communicate which message. Managing the various communication channels today requires time management and effective informal and formal communication skills. This course will cover the communication styles, mechanisms and presentation skills facilitating meetings, social marketing and ways to improve all communications.

#### Managing Change (LDS) (OEL1109) (2 credits)

Todays leaders are often called upon to implement and support the change process. They need to be able to identify and respond to internal and external factors that will determine when and what type of change initiatives are required. Environmental scanning, identifying trends, implementing and measuring successful change are all essential to developing and managing change to the benefit of the organization. Organizational readiness and risk assessment will also be covered in the context of best practices.

#### Human Relations (LDS) (OEL1110) (2 credits)

This course will provide leaders with the appropriate skills and knowledge to be able to effectively recruit personnel, train them, and manage their performance in a professional manner. Leaders will use their knowledge of the concepts of statutory and common law to conduct interviews, handle performance

problems, counsel and discipline as required, plan and direct training needs assessments, methods and program delivery.

#### Leading Responsibly (LDS) (OEL1111) (2 credits)

Sustainability in business is often related to profitability. Organizations now need to incorporate practices that include a more holistic approach to the responsibility corporations have to their communities and the environment. Leaders need to assess the impact of the business in an ethical and globally sustainable way using measures such as Corporate Social Responsibility and triple-bottom line accounting.

#### Leading Teams (LDS) (OEL1112) (2 credits)

This course will examine the leaders role in the development and success of teams in the workplace. Leaders will learn the differences between a group and a team, analyze various types of teams including Self Directed Work Teams, and explain how coaching and mentoring skills assist team effectiveness.

## Finance (LDS) (OEL856) (2 credits)

Leaders in any organization need to understand the cost of doing business. Financial documents are used to explain how money is used in a business and can be interpreted to predict an organization's success. The ethical and effective use of financial statements and ratio calculations for forecasting and budget preparation can ensure investments or withdrawals within an organization will produce a healthy return or mitigate decline in other areas. Knowing the processes for assessing ROI, creating a budget and anticipating variances are critical in any organization in order to make effective decisions.

# Legal Office Assistant

Certificate (Part-time Distance Education ) (2026) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

Legal Office Assistants aid lawyers in providing legal services. A career as a legal office assistant will give you insight into the working life of a law firm or a legal environment.

This program is not intended for law clerks or paralegals.

The Legal Office Assistant is a part-time program that is offered online via distance education. You must have access to a computer, the internet and an email account. All courses are offered online via the internet. Online courses begin every January, May and September.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

#### ACADEMIC RECOMMENDATIONS

It is recommended that participants have an aptitude for detail, excellent writing and communication skills, familiarity with office procedures and computer systems, knowledge of formats, and a typing speed of at least 35 wpm.

## **CAREER PATHS**

Graduates of the program may seek employment in: private law offices, corporate legal departments, insurance companies, real estate offices, financial institutions, government offices and agencies.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **PROGRAM OF STUDY**

#### SEMESTER 1

OEL1246-3 Legal Office Procedures OEL1252-3 Wills and Estates Law Procedures OEL1253-3 Real Estate Procedures OEL1254-3 Corporate Law Procedures OEL562-3 Legal Terminology



OEL606-3 Litigation Practice and Procedure 1 OEL673-3 Real Estate Practice and Procedure 2 OEL674-3 Litigation Practice and Procedure 2 OEL687-3 Family Law Practice and Procedure

## **Course Descriptions**

#### Semester 1

#### Legal Office Procedures (OEL1246) (3 credits)

## Wills and Estates Law Procedures (OEL1252) (3 credits)

This course examines the role of a legal administrator in relation to wills and estates law proceedings in support of the legal team. Students identify the components of forms used in each field, including, but not limited to, Powers of Attorney and wills. Emphasis is placed on Ontario legislation governing the administration of estates. Students are also expected to determine the appropriate uses of client information based on techniques learned in the course and knowledge gained about the fields.

#### Real Estate Procedures (OEL1253) (3 credits)

This course is designed to enable students to understand the steps and procedures of a residential real estate transaction and the purpose of each stage. Real Estate Law terminology, a study of the land systems in Ontario, and documents used both paper and electronic are examined.

## Corporate Law Procedures (OEL1254) (3 credits)

This course examines the role of a legal administrator in relation to corporate law proceedings in support of the legal team. Students identify the components of forms used in each field, including, but not limited to, annual filings, articles of incorporation, and corporate changes. Emphasis is placed on corporate regulation measures at the Ontario and Federal levels. Students are also expected to determine the appropriate uses of client information based on techniques learned in the course and knowledge gained about the fields.

#### Legal Terminology (OEL562) (3 credits)

Students will build a vocabulary of common legal terminology used within a law office, government agency, court systems, social services and current affairs through practice, study guide and quizzes.

#### Litigation Practice and Procedure 1 (OEL606) (3 credits)

Advance your knowledge and expertise in the area of civil litigation. Students will become familiar with a wide range of activities, responsibilities and document preparation in the complex area of civil litigation process including Small Claims Court, Superior Court, Family Law, Collections and Enforcement proceedings.

#### Real Estate Practice and Procedure 2 (OEL673) (3 credits)

As a continuation of Real Estate Practice & Procedure 1, you will review the processes and procedures generally used in a law office for real estate transactions including focus on Mortgages, Commercial vs. Residential properties, title issues, EREG system and more.

#### Litigation Practice and Procedure 2 (OEL674) (3 credits)

As a continuation of Litigation Practice & Procedure 1, you will review the processes and procedures generally used in a law office for the purpose of litigation.

#### Family Law Practice and Procedure (OEL687) (3 credits)

Develop a basic knowledge of family law practice and procedures as defined by the Rules of Civil Procedure for Ontario and the Family Law Act as required in the role of a Legal Assistant. This course will include knowledge of domestic contracts, divorce procedure, and family litigation.

## Marketing Specialist

**Certificate (Part-time Distance Education ) (2032)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Marketing Specialist Certificate is designed to provide you with an opportunity to focus exclusively on marketing topics thereby acquiring specialized skills and knowledge that will prepare you for an entry level position in a variety of marketing settings. This includes participation in the design of an organization's marketing and business plan.

All courses are offered online via the internet. Online courses begin every January, May and September. Some courses are also offered starting each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 5 years, unless otherwise specified.

#### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English or mature student status.

#### **CAREER PATHS**

Entry level position in a variety of marketing settings including participation in the design of an organization's marketing and business plan.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca</u>.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1015-3 Personal Selling OEL1153-3 Consumer Behaviour OEL1155-3 Marketing Research OEL464-3 Marketing 2 OEL661-4 Finance and Accounting Math OEL768-3 Marketing 1

#### **Course Descriptions**

#### Semester 1

**Personal Selling** (OEL1015) (3 credits) This course is designed to provide students with the an introduction to the sales process and is intended to help students to develop their selling, communication, and negotiation skills in order to be successful in a sales career. Topics presented include: the steps in the selling process, ethical issues in selling, the importance of the sales function, and integrating technology in the sales process. Students also learn how to develop negotiation skills, establish successful customer relationships, develop winning communication skills in a variety of presentation situations. This course is highly interactive and each student will be expected to fully participate online. Each student will be required to prepare and deliver a sales presentation as a part of this course.

#### Consumer Behaviour (OEL1153) (3 credits)

This course will provide you with the opportunity to gain an understanding of how consumers make decisions regarding what to buy, what brand to buy, when to buy and how much to pay. Psychological, socio-cultural and situational influences on this decision-making process are explored in depth. The objective is to be able to intervene in the process to modify the consumers` behaviour and persuade them to move in a favourable way.

## Marketing Research (OEL1155) (3 credits)

The Marketing Research course provides a framework of fundamental research methods including traditional quantitative tools and qualitative applications. In this course students will understand the interrelationship among the parts of the research process.

## Marketing 2 (OEL464) (3 credits)

Marketing 2 is designed to provide students with a sound grounding in the field of marketing. Emphasis is placed on the formulation of integrated marketing strategies that play a role in achieving organizational objectives. The course is divided into four segments: price strategy and management; distribution management; marketing communications; and emerging directions in marketing. The first three segments of Marketing 2provide coverage of the remaining components of the marketing mix that was introduced in Marketing 1.

## Finance and Accounting Math (OEL661) (4 credits)

This course introduces the student to the concepts and procedures of the time value of money calculations used in Mathematics of Finance. It covers topics in simple interest, compound interest, simple and general annuities, bonds and cost-benefit analysis.

#### Marketing 1 (OEL768) (3 credits)

Marketing 1 is designed to provide students with a sound grounding in the field of marketing. Emphasis is placed on the formulation of integrated marketing strategies that play a role in achieving organizational objectives. The course is divided into four segments: marketing process and marketing environments; marketing planning and information collection processes; buyer behaviour and targeting strategies; and marketing mix (two components of the mix are discussed: product and price).

## Medical Transcription

Certificate (Part-time Continuing Education ) (3052) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Medical Transcription Certificate will give you the opportunity to acquire expertise in the language of health care and the medical environment. You will gain the knowledge and skills required to transcribe dictated reports and correspondence. In addition to transcribing the report into the desired format, transcriptionists also verify the dictation for accuracy - both medical accuracy and English language accuracy - so that the final report is a clear, medically accurate representation of the encounter between patient and provider. The development of the electronic medical record has increased the importance of ensuring the accuracy of the patient's medical history, as more medical professionals access and rely on this record. Transcriptionists play a vital role as part of the medical team.

Please note that this program has **not** been assessed for requirements to qualify for Certified Medical Secretary Certification (CMS) with the Ontario Medical Secretary - Health Care Association.

All courses are offered online via the internet. Online courses begin every January, May and September. Some courses are also offered starting each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status. Students are advised that experience with word processing software is essential for success. Students must purchase a WAV pedal 7 and software and headphones.

## **CAREER PATHS**

As a graduate, your employment opportunities may include medical transcriber positions in hospital departments of Health Records, Diagnostic Imaging, and Pathology, in various medical clinics, or in private practice specialties and other community facilities, physicians` offices and online transcription companies. If you have an entrepreneurial spirit you may decide to consider using your transcription capabilities to establish an independent business.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca</u>.

## **PROGRAM OF STUDY**

SEMESTER 1 CMM115-3 Communications I HOA108-3 Health Office Keyboarding HOA109-4 Health Office Foundations HOA110-3 Understanding Pharmacology and Medical Tests MED111-3 Medical Terminology MTC102-3 Beginning Medical Transcription MTC103-3 Advanced Medical Transcription MTC104-3 Medical Transcription Styles and Practices MTC105-3 Medical Transcription Fundamentals Electives:

Choose two electives:

- MTC106-2 How To Start A Small Business
- MTC107-2 Small Business Bookkeeping
- HOA106-2 Medical Office Billing
- HOA104-3 Processing Physicians Orders
- MTC109-3 MS Office Essentials for the Health Office Personnel
- MTC100-3 Writing Grammatically
- MTC108-3 Dental Terminology

## **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Health Office Keyboarding (HOA108) (3 credits)

This course is designed to familiarize the user with beginning medical keyboarding, advanced keyboarding, medical language, grammatical and office skills. This course is not intended to be a learn to type course. It includes case histories, a variety of medical reports, technical terminology and timed writings. These exercises will help the learner increase their knowledge of terms they will encounter on-the-job, and will improve their keyboarding speed and accuracy. A very brief introduction to Medical Transcription is included.

#### Health Office Foundations (HOA109) (4 credits)

This course focuses on personal and organizational skills required by persons employed in health care in an office or clerical assistant role. It examines the health record as it is used in health care organizations with a major emphasis on confidentiality and the legal aspects of health information documentation. You will learn to effectively carry out the role of assisting with administration while in the employment of a nursing unit or health care office. Assignments provide realistic practical experiences by performing a variety of tasks designed to develop sound decision-making skills and critical thinking skills.

Understanding Pharmacology and Medical Tests (HOA110) (3 credits)

This course has been designed to support medical office personnel to develop a basic understanding of a) pharmacology and b) medical tests. Content has been developed to guide you through the various body systems using a modular based approach.

## Medical Terminology (MED111) (3 credits)

This basic course will focus on the anatomical structure and function of the human body and related terminology used to describe body parts, structure and function. Related terminology will also include general or symptomatic terms, diagnostic terms, surgical procedures and abbreviations.

## Beginning Medical Transcription (MTC102) (3 credits)

This is a beginning medical transcription course designed to provide you with a working knowledge of transcription of medical reports. Transcription is taking the spoken word and turning it into a written document. Case studies are provided so that you will gain knowledge in the transcribing of various medical reports.

## Advanced Medical Transcription (MTC103) (3 credits)

This advanced medical transcription course is designed for transcriptionists wishing to perfect their skills in medical transcription and terminology. The main purpose of this course is to develop and refine your transcription skills to a competitive level by using the learning activities included with the textbook.

## Medical Transcription Styles and Practices (MTC104) (3 credits)

Learn concepts and standards of style and format of medical reports and basic grammar rules in medical documentation. Prepare for medical transcription by applying industry standards, as set by the American Association for Medical Transcription. The course introduces information not encountered outside of healthcare documentation. You will review dictation "clips that briefly introduce you to dictation, and allow for practice in applying the standards. This will prepare you for "Medical Transcription Fundamentals" (MTC105).

## Medical Transcription Fundamentals (MTC105) (3 credits)

This course will enhance the learning achieved in previous courses for medical transcription that you will need to enter the field with confidence. You will experience a practical and effective approach, with follow-up to promote class discussion and exercises designed to reinforce concepts and procedures. You will have a conceptual and practical understanding of general medical terms and various medical specialties in a way that is easy to remember. Detailed transcription tips throughout the course will offer useful information and hints. The course includes 10 hours of actual dictation, sample reports and other data needed to prepare the documents discussed in the class.

# Nephrology Nursing

#### Certificate (3155)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada





## **PROGRAM OVERVIEW**

This program prepares nurses to deliver kidney care to affected patient across all stages of the kidney care journey, from early detection through dialysis, palliative care and transplant. It provides nurses with the knowledge they require to promote and deliver competent, safe and ethical care to those at risk for developing or affected by renal disease and/or insufficiency.

## **PROGRAM OUTCOMES**

Through successful completion of this program, the graduate will have reliably demonstrated the ability to:

- 1. Differentiate between normal and abnormal anatomy and function of the kidney and renal system and related pathophysiology to determine physiological needs and care priorities.
- 2. Discuss the diagnosis, etiology, therapeutic management and care of individuals living with and families affected by kidney disease in relation to acute renal failure, peritoneal dialysis, hemodialysis, end-stage renal disease, transplantation and palliative/end-of-life care to prioritize patient-centred priorities across the trajectory of chronic kidney disease.
- 3. Discuss considerations and implications related to nursing care for specific populations at-risk for developing or affected by kidney disease (e.g. older adults, children, individuals living with diabetes and/or hypertension, etc.) to appropriately tailor an individualized plan of care.
- 4. Examine current and emerging trends in relation to the diagnosis and care of individuals at risk for or living with kidney disease, including movement towards person-centred care in community-based settings and the functional integration of services in order to best achieve desired outcomes at the patent and system levels.
- 5. Apply a comprehensive approach to assessment and an individualized approach to care planning as guided by the nursing process to best meet the unique needs of persons at-risk for developing or affected by kidney disease.
- 6. Design care plans and practices to support individuals at-risk for or living with kidney disease to maintain health and wellness and engage in supported self-management.
- 7. Discuss adaptation and coping strategies that could assist individuals living with kidney disease to develop self-management capabilities that enable them to adopt personal heath practices and access system services and supports.
- 8. Recommend evidence-based methods and tools to support the implementation of effective nephrology nursing care within the context of inter-professional collaborative delivery models.
- 9. Examine the effectiveness of care for individuals living with kidney disease according to the appropriate nursing-sensitive outcomes and patient/community/population-level outcomes.
- 10. Examine legal issues, ethical implications and patient advocacy strategies for nurses related to the care of individuals living with and families affected by kidney disease in the context of professional practice standards.

## ADMISSIONS

#### MINIMUM ACADEMIC REQUIREMENTS

Current College of Nurses Certificate of Registration as a Registered Nurse or Registered Practical Nurse

Students must successfully complete all courses within 5 years of acceptance into the program in order to

graduate.

Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

## **CAREER PATHS**

The program is directed to licensed Practical Nurses and Registered Nurses in Ontario who are seeking to specialize or broaden their knowledge of nephrology.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: https://www.jobbank.gc.ca/

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1267-3 Living with Chronic KD OEL1268-3 Transplant Patient OEL1269-3 Hemodialysis Patient OEL1270-3 Peritoneal Dialysis OEL1271-3 Nursing Care Across the Kidney Disease Trajectory OEL1272-3 Normal and Abnormal Kidney Function OEL1282-4 Mentored Knowledge Integration

## **Course Descriptions**

#### Semester 1

#### Living with Chronic KD (OEL1267) (3 credits)

This course prepares students by providing a deepened understanding of the complexities related to the experiences and effects of kidney disease on the daily life of individuals and their families. Throughout the course, there will be an emphasis on person centered care as it applies to kidney disease. Students will be given the opportunity to examine current research, use critical thinking and problem solving skills, and incorporate nursing models and frameworks to further their understanding of the lived reality that kidney disease patients and theirfamilies must undertake.

#### Transplant Patient (OEL1268) (3 credits)

This course examines professional nursing practice in the context of caring for individuals in need of kidney transplantation. Emphasis is placed on the delivery of competent, safe and ethical care for this patient population, as guided by the nursing process, evidence-based practices and a person-centred approach to care. Methods and tools that support clinical decision-making and comprehensive

#### Hemodialysis Patient (OEL1269) (3 credits)

Hemodialysis is a common renal replacement therapy offered in hospital-based units and increasingly in community-based settings, including the home. This course prepares the learner with requisite knowledge for providing competent, safe and ethical care to the hemodialysis patient, as guided by the nursing process, evidence-based practices and a person-centered approach to care. Methods and tools that support clinical decision-making and comprehensive approaches to care are emphasized.

#### Peritoneal Dialysis (OEL1270) (3 credits)

Examine professional nursing practice in the context of caring for individuals undergoing peritoneal dialysis. Emphasis is placed on the delivery of competent, safe and ethical care for this patient population, as guided by the nursing process, evidence-based practices and a person-centered approach to care.

Methods and tools that support clinical decision-making and comprehensive approaches to care are emphasized.

#### Nursing Care Across the Kidney Disease Trajectory (OEL1271) (3 credits)

This course deepens the learners understanding of authentic therapeutic relationships within the context of caring for the person with kidney disease through health promotion, disease prevention and management and palliative/end-of-life care. A person-and family-centered approach is emphasized as foundational to developing and implementing an individual plan of care in collaboration with the inter-professional team. Team-based interventions to support patient empowerment and well-being throughout the lifespan and course of treatment are

#### Normal and Abnormal Kidney Function (OEL1272) (3 credits)

This course prepares the learner with the knowledge required to understand the normal anatomical and structures and physiological functions of the renal system. It introduces the experienced nurse to etiology and pathophysiology related to acute and chronic kidney conditions, their diagnoses, typical progression and common implications for individuals at risk for developing or affected by kidney disease and their families.

## Mentored Knowledge Integration (OEL1282) (4 credits)

This course provides the learner with opportunities to deepen, integrate and apply knowledge related to concepts, care and treatments modalities in nephrology nursing through a coordinated online seminar and mentored practicum. Students apply professional practice concepts and synthesize knowledge acquired throughout the program by developing and presenting a knowledge integration project that emphasizes an evidence-based and person-centered approach to meeting complex needs of populations at risk for or affected by kidney disease. Building upon curricular outcomes of the program, emphasis is placed on emerging trends, issues and health system transformation priorities related to the growing need to provide care in community-based settings.

## Occupational Health and Safety

Certificate (Part-time Continuing Education ) (3260) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

There is a growing concern for the safety of people in their work environments and the related hazards that may be found therein. Prompted by governments and their agencies, labour and management have identified the need for greater experience, knowledge and expertise in the field of occupational health and safety for the protection of people in the workplace. This program provides you with solid training in the required practices of occupation health and safety. In addition to providing the fundamentals, the program also incorporates components that provide you with the knowledge to oversee workplace safety programs and offer solutions.

Successful Completion of this certificate program may meet the eligibility requirements for CRST certification.

For more information regarding CRST certification, please refer to the CRST certification requirements at the following link.

## https://www.bcrsp.ca/prospective-certificants/about-crst-certification

All courses are offered online via the internet. Online courses begin every January, May and September.

This program is not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (ENG4C) or mature student status.

#### ACADEMIC RECOMMENDATIONS

Familiarity with computers and the Internet in general.

## **CAREER PATHS**

Occupational health and safety practitioners work in government, business and industry; all environments in which potential hazards to safety and health must be identified and controlled.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **PROGRAM OF STUDY**

## **SEMESTER 1**

OEL1092-3 Legislation for Health and Safety OEL1093-3 Environment Management: An Introduction OEL125-3 Occupational Health & Safety OEL525-2 Management Labour Concerns in Occupational Health and Safety OEL569-3 Industrial Hygiene OEL595-3 Fire Protection OEL724-3 Ergonomics

## **Course Descriptions**

#### Semester 1

#### Legislation for Health and Safety (OEL1092) (3 credits)

This course covers the various jurisdictions; how to locate the specific legislation; the interface between the statutes, regulations, codes, and standards; the obligations of employers and of employees; the Workplace Safety and Insurance Act and Regulations, filing claims, entitlement decision making, benefits, appeals, and re-employment.

#### Environment Management: An Introduction (OEL1093) (3 credits)

This course facilitates the development of analytical and evaluation skills required in the management of environmental issues. You will gain a better understanding of the complexity of environmental policies, legislation procedures, and familiarity with the implications and effects of environmental management strategies. The application and development of site inspections and program auditing are explored to assist in the recognition and analysis of potential environmental risks as they would apply in the development of an environmental management system.

#### Occupational Health & Safety (OEL125) (3 credits)

This course introduces participants to the broad and ever-changing field of occupational health and safety, an inherently technical subject area. The multiple dimensions of the various issues-technical, legislative, political, and personal-are a required part of the training for a professional in this field or for someone who is involved with this kind of operation. Major topic areas include the Occupational Health and Safety Act, WCB, WHMIS, transportation of dangerous goods, accident prevention and investigation, physical and biological agents, and the management of Occupational Health and Safety programs.

#### Management Labour Concerns in Occupational Health and Safety (OEL525) (2 credits)

Emerging trends and current management issues, concepts, and practices pertaining to the field of occupational health and safety are examined. Discussion focuses on several functional characteristics within organizations that pose unique challenges for the practitioner attempting to effectively manage resources, both material and human.

#### Industrial Hygiene (OEL569) (3 credits)

Workplace safety encompasses the anticipation, recognition, evaluation and control of chemical, physical and biological hazards arising in or from the workplace. Workplace Hazardous Materials Information System (WHMIS) and other relevant legislation are explored.

#### Fire Protection (OEL595) (3 credits)

This course provides students with specific knowledge related to fire and life safety. Topics include the chemistry and physics of fire, building design for life safety, and other aspects of fire and life safety. Applicable legislation related to fire and life safety is also covered.

#### Ergonomics (OEL724) (3 credits)

An overview of ergonomic principles will highlight basic worksite investigation and familiarization with basic principles relating to anatomy, biomechanics, physiology, manual material handling, cumulative

trauma disorders and office ergonomics.

## Office Assistant

**Certificate (Part-time Continuing Education ) (2036)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

Looking for a job can be tough. Companies want people with skills and experience. But if you don't have current skills, successfully getting employment can pose a real challenge. Skilled office clerical support is vital for success in today's office environment. This core program will prepare you with fundamental computer and service skills for any office environment. Completion of this certificate provides training for entry into a variety of office clerical support positions.

All courses are offered online via the internet. Online courses begin every January, May and September. Some courses are also offered starting each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

## **CAREER PATHS**

As a graduate of this certificate you will be equipped with the skills needed for entry into office clerical support positions in a variety of business sectors. Occupation titles may include Receptionist, Office Clerk, Administrative Assistant and others.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1063-1 Outlook Level 1 OEL1078-3 Quickbooks Level I OEL1084-3 Computer Keyboarding Skills I OEL1172-3 Excel OEL1221-3 Office Technology and Procedures OEL136-3 Introduction to Computers OEL384-3 Building and Maintaining Customer Relationships OEL657-2 Word - Specialist OEL770-3 Communications II OEL858-4 Office Simulation

## **Course Descriptions**

#### Semester 1

#### Outlook Level 1 (OEL1063) (1 credits)

Use Outlook's e-mail component to effectively manage incoming and outgoing messages. Explore other Outlook components to schedule appointments, manage contacts and keep track of tasks and projects. Students must have Outlook 2016 installed on their computer.

#### Quickbooks Level I (OEL1078) (3 credits)

This course is an introduction to QuickBooks. You will learn the how to make General Journal entries, enter payroll transactions; as well as enter Accounts Receivable and Accounts Payable transactions. We will also look at various reports used to analyze a business financial activity.

#### Computer Keyboarding Skills I (OEL1084) (3 credits)

This is a learn to type course. In this course you will learn keyboarding techniques using various methods. Keyboarding speed and accuracy will be emphasized. Proofreading and editing documents is covered. Research about repetitive stress injury and proper ergonomics will be included. You should be able to achieve a speed of 25 to 30 net words per minute. (Note: It is to your advantage to aim higher than the minimum of 25 nwpm. Most employers require a greater speed).

#### Excel (OEL1172) (3 credits)

Learn to use MS Excel for Windows, a terrific Spreadsheet package to create and format workbooks (a collection of spreadsheets) in order to analyze data and make more informed business decisions. Learn to create, edit, format and print workbooks. Use mathematical formulas and functions. Create and format Charts. Learn how to create shapes and insert images. You will also learn to cut, copy and paste data within worksheets and workbooks.

#### Office Technology and Procedures (OEL1221) (3 credits)

This course helps the student acquire practical and transferable office administration skills, attitudes, behaviours and knowledge, which can be valuable in obtaining and retaining careers in todays fast-changing office environment. Topics covered include Internet research and reporting and e-mail messages; managing time and stress; telecommunications; office reception and customer service; planning meetings and travel arrangements; handling the office mail; and records management.

#### Introduction to Computers (OEL136) (3 credits)

This course will familiarize students with the digital world by exploring the hardware and software of their computer system. Graduates will be able to use the most common functions of the Windows 10 operating system including Windows Explorer for file management, utility programs, Internet Explorer/Edge for social media while observing and identifying security and privacy concerns and issues. This course will familiarize students with both the hardware and software of their computer system. (Students using Windows 8 and Mac OS will also explore the common features and file management of their operating system). This course also reviews networks, internet and email use.

#### Building and Maintaining Customer Relationships (OEL384) (3 credits)

In this course, you will develop an understanding of customer service and the skills associated with understanding the needs of customers, meeting those needs, and fostering and environment that encourages customers to return.

#### Word - Specialist (OEL657) (2 credits)

Learn to use MS Word for Windows, a terrific word processing package that has the convenience of pull-down menus. Learn to create, edit, format and print documents. Use paragraph, page and character formatting commands. Create multiple page documents with tables, and desktop publishing with MS-Word.

#### Communications II (OEL770) (3 credits)

Effective communication is an essential employability skill required for the workplace and attaining a career position. This course focuses on developing and enhancing personal presentation and communication skills required to function in the workplace. Students will research and prepare a variety of standard business documents and correspondence used across industries. An emphasis will be placed on researching and compiling a targeted job search portfolio that includes cover letter, resume, and related documents. Utilizing technologies for the purpose of creating a professional presence in digital environments is introduced.

#### Office Simulation (OEL858) (4 credits)

You will have an opportunity to integrateyour word processing and spreadsheet skills by completing a variety of office tasks. You will prioritize work in order to complete tasks within time constraints. This course is a capstone course of the Office Assistant Certificate program.

## Palliative Care

Certificate (Part-time Distance Education ) (3255) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The program is designed to develop knowledge, skills and attitudes required to be involved with caring for the terminally ill and their families. This program benefits social service workers, RPNs, personal support workers, volunteers and clergy. Students will develop compassionate care skills and knowledge of comfort measures to improve the quality of remaining life for those with terminal illness.

Thisis a part-time program that is offered online via the internet, while the final course (PCC105) is offered via independent study and can be started at any time. Online courses begin every January, May and September. Some online courses begin each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

## **CAREER PATHS**

Graduates will have a specialized understanding of providing compassionate care in which the quality of life is the objective. Social service workers, RPNs, personal support workers, volunteers and clergy would all benefit from this training.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca.</u>

## **CLINICAL/LAB OR FIELD PLACEMENTS**

Fieldwork experience provides the student with the opportunity to apply classroom theory to an actual employment situation. Students with experience in palliative caremay apply for prior learning assessment (PLAR).

All applicants with be required to submit documentation of having completed the following procedures prior to entering clinical/lab, identified courses and/or field placement components of the program. If the appropriate documentation is not received with at least two weeks before the start of the identified clinical/lab/course and/or field placement, it may be necessary to withdraw the student from the course.

- A current (within six months) Police Record Search. This is required by students as they are enrolled in a program during which they will have unsupervised access to vulnerable persons
- Immunization and Heath Record Form. This form includes the following immunization

requirements:, Two-step TB test, Immunity against measles, mumps and rubella, current tetanus, diphtheria immunization, current influenza immunization.

- Statement of Confidentiality Form, WSIB, and Workplace Agreement Form. These forms will be given to you to sign prior to your fieldwork placement.
- WHMIS.

All costs associated with these requirements are the responsibility of the student.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1164-2 Psychological and Social Implications OEL587-2 Comfort Measures OEL602-2 Orientation to Palliative Care OEL603-2 Palliative Care Communications OEL648-3 Ethical/Legal and Spiritual Concerns PCC105-4 Palliative Care Fieldwork Placement

## **Course Descriptions**

#### Semester 1

#### Psychological and Social Implications (OEL1164) (2 credits)

This course is designed to enable you to develop the basic knowledge and skills required to understand psychological and social implications in oncology and palliative care patients and their families throughout the trajectory of the cancer experience. Explore the theories of death and dying in relation to various life stages and cultural implications. You will learn how to provide empathetic and sensitive care to client, family and significant others. Topics to be explored include historical views on cancer, coping, factors affecting coping and helping relationship, sexuality and oncology, crisis management, psychosocial issues in Cancer/Palliative care and burnout and ethical issues.

#### Comfort Measures (OEL587) (2 credits)

The focus will be on comfort measures for the terminally ill patient. There will be an emphasis placed on promoting a realistic independence for the client based on his/her support systems.

#### Orientation to Palliative Care (OEL602) (2 credits)

This course will provide an overview of Palliative Care and coping with death, dying and grief. The focus is to provide you with a review of the concepts of Palliative Care, the multidiscipline team, hospice, current approaches to care, roles, issues and expectation. Identify what resources are available and discuss home care vs. institutional care.

#### Palliative Care Communications (OEL603) (2 credits)

This course will focus on communication with the terminally ill patient. Topics include: effective communication techniques with the terminally ill and their families, basic processes and steps of effective communication, how to recognize influencing factors of personal and cultural attitudes in communication, discuss and identify basic verbal and non-verbal communication and discuss and apply basic techniques of communication used to establish a trusting relationship.

#### Ethical/Legal and Spiritual Concerns (OEL648) (3 credits)

This course provides an overview of ethical, legal and spiritual concerns in palliative care. Explore the theories of death and dying in relation to various life stages and cultural implications. You will learn how to provide empathetic and sensitive care to client, family and significant others.

Palliative Care Fieldwork Placement (PCC105) (4 credits)

This placement will allow students the opportunity to learn about organizations and agencies currently providing Palliative Care in their community. Hands-on skills will be acquired to enhance the knowledge and abilities of those involved in a helping capacity with the terminally ill and their families.

## Perioperative Nursing

#### Certificate (3057)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



COLLEGE

## **PROGRAM OVERVIEW**

Perioperative nursing is a nursing specialty in which nurses work with patients who are having operative or other invasive procedures. Perioperative nurses work closely with surgeons, anaesthesiologists, surgical technologists, and nurse practitioners in a variety of perioperative settings, which can include hospital and non-hospital surgical suites, interventional radiology rooms, and ambulatory care clinics. This program will support Registered Nurses (RNs) and Registered Practical Nurses (RPNs) in building the necessary knowledge and expertise to care for clients in perioperative settings. The program includes four theory courses designed to provide a theoretical knowledge base in perioperative nursing, followed by a field placement where students will apply the concepts learned throughout the program.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Entrance and Certificate Requirements:

- Current College of Nurses Certificate of Registration as a Registered Nurse or Registered Practical Nurse.
- Applicants possessing degrees/diplomas from institutions where the language of instruction was not English will be required to provide test scores as evidence of their English language proficiency such as IELTS 6.5 with no bands less than 6.0, or equivalent scores in other recognized standard tests of English.
- Students must successfully complete all courses within 5 years of acceptance into the program in order to graduate.
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

## **CAREER PATHS**

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **CLINICAL/LAB OR FIELD PLACEMENTS**

Sault College's priority will always be to try to find a suitable Field Placement in your home community.

To be able to attend these practicum experiences, you'll need to complete the requirements listed below and bring in documents to support completion prior to starting your practicum placement. This is necessary to have in place before practicum starts as planning begins several weeks in advance. Having your requirements completed ensures that you are able to gain the experience needed to meet the course outcomes successfully.

1. Standard 1st Aid Certificate (current within 3 years)

- 2. CPR (Health Care Provider or Basic Life Support Level) Certificate (yearly recertification required)
- 3. WHMIS Certificate (current within one year)

4. N95 Mask Fit Testing Card (renew every 2 years). Successful mask fit testing requires a **clean shaven face** (minimal facial hair) to administer the test.

#### 5. Immunization & Health Record

• A complete College Health Form along with official immunization documentation must be submitted it to the College Health Centre. Contact your health care provider, medical clinic or in Sault Ste. Marie and District, Algoma Public Health if you need to update your immunization record.

#### Documentation of the following is required:

- proof of a 2-step Mantoux test for tuberculosis. For a known positive test, you must be assessed by a physician and receive medical documentation to have access to placement (a chest x-ray is required). If a 2-step was completed over a year ago; a 1 step TB test is required.
- proof of measles, mumps and rubella immunization
- proof of tetanus/diphtheria immunization
- proof of chicken pox immunization
- Influenza immunization each October/November of the program. The flu vaccine is not mandatory however in the event that a student refuses the vaccine, the student must follow placement agency policies. This may mean removal from clinical placement for the duration of an influenza outbreak. Students can contact their coordinator if they have any questions.
- **NOTE:** Hepatitis B vaccination is not mandatory but strongly recommended.
- successful completion of all four theory courses
- Proof of current and valid RN or RPN registration

#### **Criminal Record Check with Vulnerable Sector Search**

- This document is mandatory for agencies to grant access to vulnerable persons. You will be given detailed information about obtaining a current Criminal Record Check during the first month of classes or when clinical placements are confirmed. (Note: If a criminal record exists or charges are pending, you are required to disclose this information to the Chair of the Health Programs before the start of your program.)
- Criminal Record Check with Vulnerable Sector Search is a yearly requirement that must be updated annually.

All costs associated with these requirements are the responsibility of the student.

You will also sign a Statement of Confidentiality Form.

For further information regarding clinical and field placement requirements for this program, please contact Carla Bumbaco either by email: <u>carla.bumbaco@saultcollege.ca</u> or by phone: 705-759-2554 ext. 2658.

## **CERTIFICATIONS**

Upon successful completion of the online Perioperative Nursing certificate program, students will obtain a Sault College certificate.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1004-3 Perioperative Nursing 1 OEL1035-3 Perioperative Nursing 2 OEL1045-3 Perioperative Nursing 3

## **Course Descriptions**

#### Semester 1

## Perioperative Nursing 1 (OEL1004) (3 credits)

This course is designed to provide the nurse with an increased knowledge level of the role s/he will take, of the other professionals s/he will encounter, the basic equipment and instruments used, the principles of aseptic technique, and the importance of infection control within the perioperative setting. Where relevant a basic anatomy review will be included for each section. The focus will be on the adult patient (age 19 to 65), the different types of operations performed and the instruments required. The overall goal of the course is to present the knowledge and skills required to prepare the nurse to practice within a surgical setting at a beginner's level.

## Perioperative Nursing 2 (OEL1035) (3 credits)

This course explores larger general and gynecological surgeries, anatomy, positioning, equipment, instrumentation, and includes wound healing, dressings and drains. Where relevant, a basic anatomy review will be included. The focus will be on the adult patient, nursing care required, the different types of operations performed, and the instruments necessary for each type of operation.

## Perioperative Nursing 3 (OEL1045) (3 credits)

Surgeries specific to orthopaedics, ENT, neurosurgery, plastics, paediatrics, ophthalmology and trauma. Discussion includes anatomy, instrumentation, patient care and positioning, special equipment required and information unique to the above surgical topics.

#### Perioperative Nursing 4 (OEL1046) (3 credits)

Surgeries specific to cardiac, thoracic, vascular, genitourinary, geriatrics and ambulatory day surgery. Discussion includes anatomy, instrumentation, patient care and positioning, special equipment required and information unique to the above surgical topics.

#### Perioperative Nursing Placement (PNP100) (10 credits)

Goals are set and strategies are identified to meet the student's needs in selected perioperative areas. This 150-hour placement provides the opportunity to apply theory to the perioperative clinical setting that best suits your learning needs. A major assignment will be to examine a specific surgery and formulate a case study.

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## Professional Bookkeeper

Certificate (Part-time Distance Education ) (2052) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Professional Bookkeeper Certificate program provides you with the knowledge required to perform bookkeeping functions. This program consists of five courses which must be completed within seven years of your start date.

This program is delivered online via the internet. Most online courses are offered at the start of each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English(C) ENG4C or mature student status.Basic computer skills are also required.

#### **CAREER PATHS**

Graduates may seek employment in small business, as well as medium and large-sized corporate environments in all sectors.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

## **CERTIFICATIONS**

The courses are recognized by the Canadian Institute of Bookkeeping (CIB) toward their program. Further part-time studies to meet CIB's requirements are available on-line. For further information on CIB contact their website at <u>www.cibcb.com</u> or phone 416-925-9420.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1024-3 Accounting Basics I OEL1025-3 Accounting Basics II OEL1229-3 Computerized Accounting OEL237-3 Taxation I OEL732-3 Payroll Administration

## **Course Descriptions**

#### Semester 1

#### Accounting Basics I (OEL1024) (3 credits)

This course introduces the student to how accounting information is used by, and meets the needs of both internal and external users through effective and efficient communication as well as what accounting information is required by a business concern to reflect clearly the operating results of the enterprise over its operating life. Throughout the course, students will be introduced to generally accepted accounting principles, the interpretation and preparation of financial statements and how this information is recorded in the various business records.

#### Accounting Basics II (OEL1025) (3 credits)

In this second of the two introductory accounting courses, students will expand their understanding of accounting principles and concepts while covering specific topics including: accounts receivable, capital assets, corporations' shareholders' equity, and bonds payable. Preparation of the Statements of Retained Earnings and Changes in Financial Position will also be covered. Finally, the students will expand their understanding of the role of financial statement users by studying financial statement analysis.

#### Computerized Accounting (OEL1229) (3 credits)

This course introduces students to a multi-module accounting software program designed for small to medium-size businesses. Students will use the software and their knowledge of Generally Accepted Accounting Principles (GAAP) to create and maintain accounting records, including period end procedures and the creation of financial statements for sole proprietorships. Note: This course uses Sage 50

#### Taxation I (OEL237) (3 credits)

This is an introductory course to federal income tax in a Canadian setting. Students will gain an understanding of the underlying objectives and principles of income taxation. Topics include employment income, business income, income from property, investment income and capital gains. Personal tax returns for individuals will be completed both manually and using a tax preparation software program.

#### Payroll Administration (OEL732) (3 credits)

Students will examine the following topics: maintaining payroll records, salaried; hourly; commission and contract workers; taxable benefits, statutory and other deductions; preparation of payroll journal entries; preparation of Record of Employment; preparation of T4's and T4 Summary; Workers Compensation; Employment Standards; and Computerized Payroll. Prior accounting knowledge would be an asset for this course.

## Project Management

**Certificate (Part-time Continuing Education ) (2024)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

There is a strong demand for project management training in many sectors of the economy. Construction supervisors, engineers, administrators, non-profit and government agencies all require expertise in project management. The purpose of this certificate is to provide participants with advanced knowledge and skills in the principles of project management to improve organizational capacity to implement successful projects.

All courses are offered online via the internet. Online courses begin every January, May and September. Some courses are also offered starting each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 (C) ENG4C or mature student status.

#### **CAREER PATHS**

The program is directed to managers and supervisors in a variety of fields (industrial, government and service sector, retail).

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1175-3 Project Communication and Human Resource Management OEL1176-3 Project Contracting, Procurement and Quality Management OEL1177-3 Project Cost and Risk Management OEL617-3 Introduction to Project Management

#### **Course Descriptions**

#### Semester 1

#### Project Communication and Human Resource Management (OEL1175) (3 credits)

The most valuable resource in any project is often the people whose talent and efforts will contribute to its success. This course will explore organizational communications, how it functions and how to overcome

communication barriers in groups and with individuals. The course also emphasizes how to build the skills and knowledge needed to plan an effective project group, recruit quality people to staff it, and build them into an effective team. Participants will also learn leadership principles and tools for successfully motivating a team.

## Project Contracting, Procurement and Quality Management (OEL1176) (3 credits)

Quality has become a primary component of competitive advantage and customer loyalty in the global economy. This applies to services as well as products. In the project management context, all work products must support the project throughout its life cycle. The scope of the project must be defined to include the quality standards of the project outputs, thus planning-in quality. Procurement and contracting are also major components of the global economy: from local contracting to offshore outsourcing and manufacturing, companies must be able to function in a highly distributed and increasingly competitive environment ensure their survival and success.

## Project Cost and Risk Management (OEL1177) (3 credits)

The first part of this course will cover the fundamentals of project cost management and control including project estimating at the project definition and approval stage, budgeting, resource costing and allocation, and status reporting. In the second part of the course, students will be introduced to a structured multi-tiered approach that can be used to identify the different types of risks associated with projects such as technical, time, costs, quality and others. Students will learn to communicate risks effectively and share the responsibility of managing risks with your team members, customers and management.

## Introduction to Project Management (OEL617) (3 credits)

Project management practitioners need to understand the established industry norms, methods, and practices for managing all stages of the project life cycle and its related processes. Students are introduced to the fundamental principles of project management, such as project strategy, selection, scheduling, risk management, quality assurance, performance measurement, audit and closure. By participating in discussions, analyzing readings, and conducting preliminary research, students acquire a working understanding of the Project Management Body of Knowledge (PMBOK).

## Pulp and Papermaking Operations

**Ontario College Certificate (Part-time Distance Education ) (5075)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Pulp and Papermaking Operations program is most valuable if you are already working in the pulp and papermaking industry and wish to improve your knowledge of pulp and papermaking processes for personal satisfaction or employment advancement. With the rapid changes in responsibility coupled with downsizing, many employers have expressed a desire to utilize better-trained, more knowledgeable workers. Graduates of this program possess knowledge of all important processes used in this varied and large industry.

Some courses are offered online via the internet, while others are offered independent study. Online courses begin every January, May and September. Independent study courses are print-based and can be started anytime.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (ENG4C) or mature student status, with a background in science and mathematics.

## **CAREER PATHS**

While graduates may find employment at entry-level positions in pulp and paper mills, this program will be most beneficial to those already employed in the industry, or to technical sales/service personnel who call on mills throughout the country.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca.</u>

## **CLINICAL/LAB OR FIELD PLACEMENTS**

You must have access to lab facilities in a pulp and/or paper mill for PPE121 Introduction to Pulp and Paper Testing.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL136-3 Introduction to Computers OEL770-3 Communications II PPE150-3 Pulp & Paper Industry Overview

## **SEMESTER 2**

OEL815-3 Applied Resource Calculations PPE110-4 Paper Manufacture PPE121-4 Introduction to Pulp and Paper Testing PPE157-4 Pulp and Paper Science PPE164-3 Environmental Control PPE166-3 Paper Quality PPE368-5 Finishing and Converting Operations Electives:

Choose one group of electives that suits your paper mill pulping process:

- PPE112-5 Raw Materials and Mechanical Pulping Process AND
- PPE122-4 Screening, Cleaning and Bleaching Mechanical Pulps

#### OR

- PPE156-5 Raw Materials and Chemical Pulping Process AND
- PPE123-4 Screening, Cleaning and Bleaching Chemical Pulps

## **Course Descriptions**

#### Semester 1

#### Introduction to Computers (OEL136) (3 credits)

This course will familiarize students with the digital world by exploring the hardware and software of their computer system. Graduates will be able to use the most common functions of the Windows 10 operating system including Windows Explorer for file management, utility programs, Internet Explorer/Edge for social media while observing and identifying security and privacy concerns and issues. This course will familiarize students with both the hardware and software of their computer system. (Students using Windows 8 and Mac OS will also explore the common features and file management of their operating system). This course also reviews networks, internet and email use.

#### Communications II (OEL770) (3 credits)

Effective communication is an essential employability skill required for the workplace and attaining a career position. This course focuses on developing and enhancing personal presentation and communication skills required to function in the workplace. Students will research and prepare a variety of standard business documents and correspondence used across industries. An emphasis will be placed on researching and compiling a targeted job search portfolio that includes cover letter, resume, and related documents. Utilizing technologies for the purpose of creating a professional presence in digital environments is introduced.

#### Pulp & Paper Industry Overview (PPE150) (3 credits)

This is a survey course designed to give the beginning student a broad understanding of the scope of the Ontario, Canadian and global pulp and paper industry. The size, socioeconomic value and product range of the industry will be studied. Basic coverage of the technologies used in product manufacture will be covered. The economics of the industry, including the integration with the saw milling industry will be dealt with. Problems facing the industry, some possible solutions and the likely shape of the industry in the future will be discussed.

#### Semester 2

## Applied Resource Calculations (OEL815) (3 credits)

This course includes a review of basic algebraic processes, estimation, the metric system, practical

applications in plane and solid geometry, word problems, ratio, proportion, and percent.

#### Paper Manufacture (PPE110) (4 credits)

The course is designed to provide the student with the basic knowledge of the entire papermaking process starting with the nature of the fibres and stock preparation. It progresses through stock proportioning and use of chemical additives to stock delivery on the paper machine. Wet-end papermaking specifics for single and twin wire fourdrinier as well as cylinder type machines will be covered. Press types and their operation, wet press felts and felt cleaning will be studied. Paper dryers, their operation and energy consumption will be explored. Size presses, on-machine controls, overall operation and paper quality will be studied.

#### Introduction to Pulp and Paper Testing (PPE121) (4 credits)

This course will introduce students to the various routine tests done in pulp and paper mills. It is not intended to train qualified testers, but merely to allow them the opportunity to experience firsthand how the test equipment works and give them an appreciation of the value of accurate testing. Reports of students testing results will be submitted for grading. Students will be required to arrange a preceptor with a pulp and paper mill in order to complete the experiments.

#### Pulp and Paper Science (PPE157) (4 credits)

This course deals with the scientific fundamentals from the chemistry and physics disciplines which are the basics for understanding the technologies used in the pulp and paper industry. The course material is split in approximately equal portions between chemistry and physics fundamentals.

#### Environmental Control (PPE164) (3 credits)

This course is designed to provide the student with basic knowledge of the nature of liquid and gaseous waste streams arising from the manufacture of pulp and paper. Concepts of suspended and dissolved solids, biological and chemical oxygen demand (BOD and COD), toxicity, particulates and total reducible sulphur (TRS) will be dealt with. Current and innovative waste treatment processes, pollution laws, control orders and pollution economics will be covered. Special attention will be focused on provincial and federal Environmental Acts, in particular how these relate to employer and employee responsibilities.

### Paper Quality (PPE166) (3 credits)

The purpose of this course is to introduce the student to those important paper qualities needed to satisfy customer and consumer demand. Preparation of simple reports, calculation of results and the application of statistical process control will be included.

### Finishing and Converting Operations (PPE368) (5 credits)

The first part of this course covers the final stages of paper and paperboard manufacture known as paper finishing. Here, students will deal with unit processes and product qualities related to calendaring, supercalendering, winding, coating, sheeting, wrapping and storage. The second part of the course, called converting, deals with processes involved in letter press, offset and gravure printing and in the manufacture of corrugated board and cartons, folding cartons, specialty papers and absorbent products. In addition, end-use qualities and appropriate tests will be covered.

# **Records and Information Management**

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

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# **PROGRAM OVERVIEW**

This online certificate is designed to provide learners with the knowledge and skills required to maintain accurate and up-to-date records and information using the latest technology in a variety of settings including professional, scientific and technical services; finance and insurance; healthcare; public administration across all levels of government; non-profit organizations; and manufacturing. Graduates of the program will have the skills necessary to collect, classify, store, retrieve, archive and manage a spectrum of records and information, which is critical in today's digital information age.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older

Completion of grade 12 U or C English (e.g. ENG4C)

It is recommended that learners have basic Windows computer and Internet skills (e.g. managing files and folders, keyboarding, email and Internet searches).

Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate.

Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

# **CAREER PATHS**

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

# **CERTIFICATIONS**

Upon successful completion of the online Records and Information Management certificate program, students will obtain a Sault College certificate.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1315-3 Records and Information Management Fundamentals OEL1316-3 Active Records Management OEL1317-3 Document Management Technology OEL1318-3 Archives Electives:

Learners must complete two electives of their choosing from the list below:

• OEL1223 - MS Office 2016

- OEL1319 Researching and Reporting
- OEL1320 Management Information Systems
- OEL1221 Office Technology and Procedures
- OEL615 Essentials in Health Records Management

# **Course Descriptions**

#### Semester 1

#### Records and Information Management Fundamentals (OEL1315) (3 credits)

Explore the field of records management and the role of records management programs in organizations. Develop your skills in inventorying, retention and destruction scheduling, and records management, including electronic records. Optional course for Library students; required course for Records and Information Management Certificate students.

#### Active Records Management (OEL1316) (3 credits)

This course introduces skills and techniques needed to effectively manage and control active records in various formats. You will examine file plan development, typical filing systems, storage systems and equipment, and file management procedures. Required course for Records and Information Management Certificate students.

#### Document Management Technology (OEL1317) (3 credits)

An introduction to electronic documents, imaging and micrographic technology is provided in this course. You will explore how these technologies can be applied to records management, short and long-term storage and retrieval for active and inactive documents. Some topics: metadata, life expectancy of electronic storage media, secure storage media, migration and image file formats. Required course in the Records and Information Management Certificate students at Mohawk College.

#### Archives (OEL1318) (3 credits)

Develop an understanding of archival theory and practice. Focus on the nature of archival documents, the relationship between archives and records management, acquisition and appraisal, arrangement and description, reference services, preventative conservation and facility planning and security. Library option (elective) for Library and Information Technician Diploma; required for Records and information Management Certificate students.

# Social Entrepreneurship

Section B.71 6/2/2020

#### Certificate (2700)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

The fully online Social Entrepreneurship Certificate is designed for individuals who want to make a positive difference to society by operating or working for a community-based business that implements solutions to social, cultural, or environmental issues. Graduates will gain an understanding of themselves as citizens of the world and learn the entrepreneurial and business skills needed to affect change and make a positive impact through a social enterprise.

This seven-course program is comprised of six compulsory courses and one elective course, allowing learners to tailor the program to their learning needs and interests.

#### Learners must complete six compulsory courses listed below.

- OEL8008 Social Entrepreneurship
- OEL854 Global Citizenship
- OEL1387 Design Thinking
- **OEL138** Entrepreneurship
- OEL1386 Entrepreneurship II
- OEL1388 Fundamentals of Entrepreneurship

### Learners must complete one of the following elective courses listed below.

- OEL1385 Opportunities in the Green Economy
- OEL1384 Introduction to Sustainability and Business
- **OEL856** Finance (Leadership Development Series)
- OEL1101 Communication (Leadership Development Series)
- OEL1389 Methods of Fundraising
- OEL1390 Change Leadership for Sustainability

#### **PROGRAM OUTCOMES**

Graduates will be able to:

- 1. Describe how individuals can affect change and discuss how the actions of others can be incorporated into personal actions.
- 2. Describe the impact of a social enterprise.
- 3. Identify a gap (need) in the market and develop a product or service to meet that need.

- 4. Develop a business plan that includes concept identification and development, planning, start-up, maintenance, management and expansion of a small business enterprise.
- 5. Recognize the economic, social, political, and cultural variables which impact on a new business venture.
- 6. Explore the concepts of design thinking and the creative process and apply design thinking tools and methods to find solutions that resolve problems or challenges.
- 7. Lead the design for a corporate sustainability vision and mission statement that demonstrates sustainable environmental, social and professional practices for an existing or future business.
- 8. Apply ethical principles, appeals to corporate social responsibility, and accepted theories in environmental sustainability to business decisions and plans.

# **ADMISSIONS**

### MINIMUM ACADEMIC REQUIREMENTS

#### **Minimum Academic Requirements**

- 1. Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older
- 2. Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate.
- 3. Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

# **CAREER PATHS**

Social Entrepreneurs operate in a variety of fields such as health, sanitation, natural resources, service industry, hospitality, and education.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca.</u>

# **CERTIFICATIONS**

Upon successful completion of the online certificate program, students will obtain a Sault College certificate.

### **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL138-3 Entrepreneurship OEL1386-3 Entrepreneurship II OEL1387-3 Design Thinking OEL1388-3 FUNdamentals of Entreprensurship OEL8008-3 Social Entrepreneurship OEL854-3 Global Citizenship Electives:

Learners must complete one elective of their choosing from the list below.

- OEL1385 Opportunities in the Green Economy
- OEL1384 Introduction to Sustainability and Business

- OEL856 Finance (Leadership Development Series)
- OEL1101 Communication (Leadership Development Series)
- OEL1389 Methods of Fundraising
- OEL1390 Change Leadership for Sustainability

# **Course Descriptions**

#### Semester 1

#### Entrepreneurship (OEL138) (3 credits)

Get an introduction to the disposition, concepts and skills necessary to express their entrepreneurial spirit in the form of a business. An examination of an entrepreneur and entrepreneurship will be supplemented by an examination of the expression of entrepreneurism in the business world. Contemporary expressions of entrepreneurism and intrepreneurism, their contribution to the economy, their role in the changing workplace, and their role in global business will also be explored. Students will complete an entrepreneurial business plan in stages throughout the course.

#### Entrepreneurship II (OEL1386) (3 credits)

This course will cover the creation of a comprehensive business plan. The course will capture the entrepreneurial spirit, and students will get first-hand exposure to the benefits and drawbacks of starting a new business and being your own boss. Through the steps in creating the business plan, students will have the opportunity to practice start-up skills through defining markets, targeting customers, and addressing financial planning such as cash management, budgeting, and financing. At the conclusion of the course, students will each have the opportunity to ?pitch? their plan to a potential investor.

#### Design Thinking (OEL1387) (3 credits)

Design Thinking uses a designer mindset to produce business innovations in products and services, with a focus on deep understanding of and empathy with the people who use them. Following a holistic innovation process for an area of interest or organization, students build an initial business case and apply design thinking and creative problem-solving strategies to make innovation a sustainable practice.

#### FUNdamentals of Entreprensurship (OEL1388) (3 credits)

FUNdamentals of Entrepreneurship is a gamified business simulation where students assume the role of an entrepreneur pursuing their passion of selling clothing online and in their retail store. The player subscribes to the guidance of a business coach and will build a successful venture in a virtual neighbourhood. The player can upgrade their store and operations by completed learning modules and testing. Through self-paced gameplay, students learn important concepts from Finance, Human Resources, Marketing, Health and Safety, Risk Management and more. In the process, they acquire the skills to effectively run a company as they upgrade their operation by completing learning modules and quizzes. Each student has a unique playing experience via ingame customization's, such as avatar creation, and store design. All content is contained within the game ? no textbook is required.

# Social Entrepreneurship (OEL8008) (3 credits)

Social entrepreneurship blends the desire to make a positive impact on one's community by implementing business solutions to social, cultural, or environment issues through a profitable business. Students will be introduced to different models of social entrepreneurship and will learn about the key knowledge and skills needed to build their own social enterprise.

#### Global Citizenship (OEL854) (3 credits)

The world is shrinking. The ice caps are melting. A sneeze, thousands of kilometres away, starts a health pandemic, and technology enables us to intimately view not only earthquakes and tsunamis but human rights violations around the world. This reality calls for an understanding of

sustainability, diversity, and social justice. A global citizen is aware of the wider world, respects diversity, is outraged by injustice, participates in community from the local to global level, and feels compelled to act to make the world a more humane and sustainable place. Global citizenship will help student's *gain personal understanding of themselves as citizens of the world* and apply it in their own lives.

This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Social Media and Digital Communications

Section B.72 6/2/2020

Certificate (2165)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

This part-time online certificate is designed for individuals who have a background or interest in business, marketing, advertising, communications, or web design who want to learn about the dynamic field of social media and digital communications, which has changed the way organizations interact and communicate with customers and employees. Learners will gain the practical skills and knowledge needed to effectively use and leverage social and digital media tools required by today's employers, and will learn about social media marketing and strategies, including best practices and cautions; emerging technologies and tools; and communicating to different target groups using different digital communication tools.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

#### **Entrance and Certificate Requirements**

- Students must have an Ontario Secondary School Diploma (OSSD), or equivalent, or be 19 years of age or older.
- Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate.
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

# **CAREER PATHS**

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: http://www.jobbank.gc.ca.

# **CERTIFICATIONS**

Upon successful completion of the online Social Media and Digital Communications certificate program, students will obtain a Sault College certificate.

# **PROGRAM OF STUDY**

### **SEMESTER 1**

OEL1297-3 Introduction to Social Media OEL1298-3 Developing a Social Media Strategy OEL1299-3 Monitoring & Measurement OEL1300-3 Digital Communication OEL1301-3 Applied Social Media in Business **Electives:**  Learners must complete one elective of their choosing from the list below:

- OEL1302 Social Media Policy Applied
- OEL1303 Social Media Risk Management
- OEL1304 Writing for the Web

# **Course Descriptions**

#### Semester 1

#### Introduction to Social Media (OEL1297) (3 credits)

Learners explore the fundamentals of social media. Topics covered include an introduction to social media and other emerging technologies and tools, current trends and future directions, benefits, values and risks. Learners analyze case studies to assess how social media impacts and influences fields, such as communication and marketing, and how it informs future trends and developments.

#### Developing a Social Media Strategy (OEL1298) (3 credits)

Learners develop a social media strategy. The focus is on skills-building and on creating and implementing a social media strategy including identifying and working with social media tools, assessing how tools support overall branding, advertising, marketing and/or communication strategies. Learners explore, identify and engage online communities that support internal and external social media strategies. In addition, learners are introduced to resources that aid in the development and implementation of effective social media strategies. Through case studies, learners explore both best practices and cautions when designing social media strategies.

#### Monitoring & Measurement (OEL1299) (3 credits)

Learners explore how to monitor and measure the impact of a social media strategy or social media efforts. Specifically, learners learn which tools are available for monitoring and measuring social media efforts. Through online discussion, learners discuss the challenges of ongoing measurement in a rapidly changing field and explore strategies for addressing these challenges. Learners are also introduced to basic Search EngineOptimization (SEO) and how social media efforts can lead to increased and effective website traffic.

#### Digital Communication (OEL1300) (3 credits)

Social media requires a different approach to communication and writing in terms of how you write, who you are communicating with and how your message is received. Using social media tools, learners practise and assess their social media writing capacity. Topics, such as generational preferences, integrating informal writing and communication for corporate purposes, personal branding and communicating appropriately to different target groups using different digital communication tools are explored.

### Applied Social Media in Business (OEL1301) (3 credits)

Learners explore the application of social media in business organizations. A range of topics, such as corporate branding, fundraising, social media advocacy campaigns, how to realign and utilize traditional approaches to marketing, and advertising and branding using social media are discussed. Best practices for using social media as a learning and collaboration tool within organizations and in a professional networking and expertise-sharing capacity are also discussed and established.

# Strength-Based Perspectives in Helping

Section B.73 6/2/2020

Certificate (2705)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

The Strength-Based Perspectives in Helping Certificate will provide learners with knowledge and skills to apply evidence-based practices for increasing happiness, building resilience, and enhancing overall life satisfaction for self and others whether that be for personal or professional growth.

There is a growing need for professionals who can apply positive perspectives in health, education, and community services. These fields are increasingly emphasizing strength-based approaches to client care, self-care, and social development. This multi-disciplinary program will benefit learners in any workplace that focuses on optimizing human strengths and capacities, instilling hope, and promoting wellness.

This six-course program is comprised of three compulsory courses and three elective courses. The compulsory courses collectively examine the nature of happiness; the development of personal strengths and relationships; positive strategies for professional practice; and the wellness benefits of social responsibility, caring behaviour, and purposeful engagement in the world. Learners select elective courses that focus on one or more practices known to increase happiness and life satisfaction (e.g. creativity, health and vitality, relational and interpersonal skills).

### Learners will complete three compulsory courses listed below.

OEL8000 Happiness: Pathways and Pitfalls

OEL8001 Positive Perspectives: Methods and Strategies

OEL854 Global Citizenship

### Learners must complete three elective courses of their choosing from the list below.

- OEL1208 Wellness for Life
- OEL604 Stress, Wellness, and Nutrition
- OEL1368 Lifestyle Coaching
- OEL187 Creative Writing for Beginners
- OEL1369 Quest for Wisdom
- OEL1266 Mental Health and Society
- OEL1370 Introduction to Counselling
- OEL1371 Sociology: Diversity and Social Change
- OEL8011 Mental Health and Wellness

### **PROGRAM OUTCOMES**

Graduates will be able to:

- Demonstrate a strength-based approach to helping that focuses on a client's skills and interests, and their capacity for resilience, well-being and overall life satisfaction.
- Support individuals and groups in identifying personal strengths and potential sources of pleasure,

optimism, achievement and fulfillment in their own lives.

- Plan and facilitate opportunities for clients to engage in practices known to increase happiness and well-being, with emphasis on creativity, health and vitality, relational and interpersonal skills, spirituality and service to others.
- Apply solution-focused strategies for helping clients establish and maintain positive habits, attitudes and practices associated with physical, mental, social and emotional growth and development.
- Recognize socio-cultural, political and environmental factors that impact levels of happiness and well-being around the world and the ways in which individuals can effect change.
- Facilitate and encourage contributions to positive local, regional, national and/or global well-being, and understand how these initiatives support a client's own sense of purpose and meaning.
- Implement self-care strategies to enhance personal growth and professional practice, and minimize occupational stressors related to the helping professions. This includes supporting one's own resilience, optimism, and coping skills by actively investing in health and fitness, creativity, mutually supportive relationships and community connection.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

#### **Minimum Academic Requirements**

- Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older
- Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate.
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

# **CAREER PATHS**

#### **Occupational Areas:**

- Community Services
- Social Services
- Education
- Health
- Fitness
- Recreation

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca</u>

# CERTIFICATIONS

Upon successful completion of the online certificate program, students will obtain a Sault College certificate.

# **PROGRAM OF STUDY**

#### **SEMESTER 1** OEL8000-2 Happiness: Pathways and Pitfalls

OEL8001-3 Positive Perspectives: Methods and Strategies OEL854-3 Global Citizenship **Electives:** 

#### Learners must complete three elective courses of their choosing from the list below.

- OEL1208 Wellness for Life
- OEL604 Stress, Wellness, and Nutrition
- OEL1368 Lifestyle Coaching
- OEL187 Creative Writing for Beginners
- OEL1369 Quest for Wisdom
- OEL1266 Mental Health and Society
- OEL1370 Introduction to Counselling
- OEL1371 Sociology: Diversity and Social Change
- OEL8011 Mental Health and Wellness

# **Course Descriptions**

#### Semester 1

#### Happiness: Pathways and Pitfalls (OEL8000) (2 credits)

In this course, you will explore the nature of happiness (what it is and isn't) and why the things we think will make us happy, so often don't. More importantly, you will become familiar with evidence-based activities, habits, strategies and circumstances that are known to increase happiness, and can be applied to your own life and the lives of others.

Course material will be drawn primarily from the fields of Positive Psychology, Humanistic Psychology and Evolutionary Biology, but will also include explorations of happiness as reflected in the works of popular artists, musicians, and writers. Throughout the course, you will be encouraged to develop a personal philosophy of happiness that combines your own unique characteristics with evidence-based strategies for creating a well-lived life.

### Positive Perspectives: Methods and Strategies (OEL8001) (3 credits)

This multidisciplinary course focuses on methods and strategies that reflect current research in the areas of positive psychology, relational practice and strength-based interventions. There will be an emphasis on techniques that help clients identify personal sources of enjoyment and pleasure, improve interpersonal relationships, and increase life satisfaction through prosocial activities and community engagement. Attention will be given to solution-focused approaches to change, and leadership skills pertinent to various applications.

### Global Citizenship (OEL854) (3 credits)

The world is shrinking. The ice caps are melting. A sneeze, thousands of kilometres away, starts a health pandemic, and technology enables us to intimately view not only earthquakes and tsunamis but human rights violations around the world. This reality calls for an understanding of sustainability, diversity, and social justice. A global citizen is aware of the wider world, respects diversity, is outraged by injustice, participates in community from the local to global level, and feels compelled to act to make the world a more humane and sustainable place. Global citizenship will help student's *gain personal understanding of themselves as citizens of the world* and apply it in their own lives.

This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Teacher of Adults - Literacy Educator

Section B.74 6/2/2020

**Ontario College Certificate (Part-time Distance Education ) (1215)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

\*Note: this program will end December 2019

Literacy workers in Ontario have diverse and often multiple roles in the delivery of literacy programming whether instructor, advocate, counsellor, administrator, coordinator, etc. The requirements, responsibilities and options for each worker are unique to each situation. The Teacher of Adults - Literacy Educator program is designed to address the training needs of literacy practitioners. It provides an in-depth exploration of key skills, principles, practices, concepts, and professional issues involved in literacy work. Current adult educational theories are applied specifically to the special needs of literacy learners and literacy programs. The fieldwork component allows the participant to gain experience in the literacy field.

Teacher of Adults - Literacy Educator is a part-time certificate program that is offered via a variety of delivery methods. All courses are offered online via the internet and independent study. The Fieldwork Placement course is offered independent study, only. Online courses begin every January, May and September. Independent Study courses are available anytime.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

### ACADEMIC RECOMMENDATIONS

If you are not currently working or volunteering in the literacy field you should make every attempt to contact a literacy program near you. We realize that this isn't always possible-especially for those of you who live rurally-but we cannot emphasize enough how important the hands-on experience will be to your development as a literacy educator. To find a literacy centre near you, go to <u>NALD - National Adult Literacy</u> <u>Database</u> and click on Literacy Contacts. You can also look under Learn in the yellow pages of your phone book-there should be a listing for a regional literacy network. You can contact them for more information about agencies that provide direct service.

# **CAREER PATHS**

The graduate will have the skills to succeed in multiple roles in the delivery of literacy programming whether instructor, advocate, counsellor, administrator or coordinator.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

# **PROGRAM OF STUDY**

### **SEMESTER 1**

TA 237-3 Adult Literacy Learner, Module 1 TA 238-3 Assessing and Evaluating Literacy Learning, Module 2 TA 239-3 Planning for Literacy Learning, Module 3 TA 240-3 Applied Strategies for Literacy and Numeracy Instruction TA 241-3 Foundational Strategies for Literacy & Numeracy Instruction TA 244-4 Literary Educator Fieldwork Placement **Electives:** 

Choose one elective from the following:

- TA 242-3 Making it Work: Workplace Basics for Adult Educators
- TA 243-3 Professional Pathways in Adult Literacy
- TA 245-3 Planning Programs for Employment Outcomes
- TA 246-3 Learning Disabilities and Adult Literacy

# **Course Descriptions**

#### Semester 1

#### Adult Literacy Learner, Module 1 (TA 237) (3 credits)

This module is designed to help you explore the principles of adult learning with a special emphasis on applying these principles to adult literacy settings. You will examine the theory behind shaping the literacy environment to the individual - the reason why - as well as ideas for putting the theory into practice - the how.

#### Assessing and Evaluating Literacy Learning, Module 2 (TA 238) (3 credits)

Upon completion of this module, participants will be able to use a learner-centered approach to access and evaluate skills and knowledge of individual learners to help them achieve their goals.

### Planning for Literacy Learning, Module 3 (TA 239) (3 credits)

The adult learner is central to the planning process. In this course, you'll examine ways in which to shape the setting, whether small group, classroom or one-to-one, to meet specific needs of the adult learner.

### Applied Strategies for Literacy and Numeracy Instruction (TA 240) (3 credits)

In this course, instructional strategies for teaching literacy and numeracy skills in an outcomes-based learning environment are explored. The role of technology, training plans and goal-directed learning in one-to-one, small group and classroom settings are used to frame the use of various instructional strategies.

### Foundational Strategies for Literacy & Numeracy Instruction (TA 241) (3 credits)

In this course, both theories and practical knowledge about how adults learn to read, write, use numbers and become self-directed life-long learners are explored. Instructional strategies are situated within a goal-directed outcomes-based learning environment in which the learning needs of the individual learner are used as the basis for instruction.

### Literary Educator Fieldwork Placement (TA 244) (4 credits)

In this course, educators apply the practical knowledge to practical situations by arranging to work as a volunteer, in a literary program. The placement will be supervised by the course facilitator and will rely on the development by the course participant of a detailed learning plan.

# Victimology

Certificate (1245) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

This part-time online certificate is designed for professionals who work in a variety of fields (e.g. crisis response, criminal justice system, social services, child protection) providing services to and advocating for victims of crime.

Students will develop an understanding of the history and theories of victimization, victims` rights, victim populations, crime and its effects on victims, and the role of victim services agencies in the planning, delivery, and evaluation of victim services and advocacy. Specific course emphasis is given to issues such as childhood physical and sexual abuse, intimate partner violence, elder abuse, human trafficking, and sexual assault.

Graduates of the program will be able to plan, implement, and evaluate interventions aimed at prevention and healing for victims of crime; advocate for victims of crime; and develop plans for referring victims of crime to appropriate services.

#### Learners must complete six compulsory courses listed below

- Victimology: Theoretical Perspectives
- Victims of Crime
- Indigenous Peoples: Understanding and Reducing Victimization
- Victim Assistance Services
- Victimology: Assessment and Intervention
- Diversity and Victim Assistance

#### Learners must complete two elective courses of their choosing from the list below

- Human Trafficking & Intersectionality
- Violence Against Women
- Men as Victims
- Childhood Victimization
- Victimization and The Law
- Self-Care and Professional Practice

#### PROGRAM OUTCOMES

Graduates will be able to:

- 1. Assess individuals, families and groups for the risk and experience of victimization.
- 2. Advocate for victims of crime within the criminal justice and other systems.
- 3. Identify special considerations in communicating with diverse populations.
- 4. Plan, implement and evaluate interventions aimed at prevention and healing for victims of crime.
- 5. Develop plans to refer victims of crime to appropriate services.
- 6. Identify, analyze and apply current research and theory to victim services.
- 7. Assess the personal impact of delivering victim services and employ self-care strategies.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

#### **Minimum Academic Requirements**

- Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older
- Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate.
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.
- Students are recommended to have a diploma or degree in a related field prior to registering for this program.

# **CAREER PATHS**

Upon completion of the program, individuals may find employment opportunities within a variety of occupational fields providing services to victims of crime, including social services, child protection, crisis response, the criminal justice system and in policy areas related to victimization.

Potential career and industry options may include working in:

- Child Protection
- Group Homes or Shelters
- Community-Based Victim-Oriented Resource Centres
- Social Services

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>http://www.jobbank.gc.ca.</u>

# CERTIFICATIONS

Upon successful completion of the online Victimology certificate program, students will obtain a Sault College certificate.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1137-2 Indigenous Peoples: Understanding and Reducing Victimization OEL1234-3 Victims of Crime OEL1278-3 Victim Assistance Services OEL1357-3 Victimology: Theoretical Perspectives OEL1358-3 Victimology: Assessment and Intervention OEL1359-2 Diversity and Victim Assistance Electives:

Learners must complete two electives from the list below:

- OEL8003 Human Trafficking & Intersectionality
- OEL1360 Violence Against Women
- OEL1361 Men and Victimization
- OEL1362 Childhood Victimization

- OEL1363 Victimization and the Law
- OEL1364 Professional Development and Self Care

# **Course Descriptions**

#### Semester 1

#### Indigenous Peoples: Understanding and Reducing Victimization (OEL1137) (2 credits)

Indigenous people are overrepresented both as victims and offenders. You will explore the impact of the residential schools, effects of colonialism on traditional values and culture, as well as structural victimization. You will critically examine and assess Canadas principal approaches to addressing victimization and offending by and against Indigenous peoples. Through discussion and experiential learning from an Indigenous perspective, you will gain insight and understanding of Indigenous teachings, Indigenous worldview, culturally relevant healing, crime prevention and restorative justice.

#### Victims of Crime (OEL1234) (3 credits)

It is essential for professionals in the field of victimology to ensure that victims of crime are not further traumatized by the very interventions designed to assist. Students examine the impact of various types of victimization including cyber-crime, homicide, sexual assault, elder abuse, drunk driving, assault, intimate partner violence, globalization, human trafficking and fraud. Students explore issues of grief, loss, trauma response and the costs associated with victimization. Case studies and role playing, assessment, advocacy and advanced communication skills are developed through discussion.

#### Victim Assistance Services (OEL1278) (3 credits)

Victim service professionals are required to collaborate with service agencies to plan, deliver and evaluate victim service programs and initiatives. Students research and identify the vast array of community, provincial and national services, including financial remedies, counselling, mental health, medical and addiction services. Students learn to facilitate interagency communication and multidisciplinary case management. Through case studies, students identify and assess the needs of victims, identify the most appropriate referrals, and present strategies and approaches that can be used to advocate for victims within and between various systems.

### Victimology: Theoretical Perspectives (OEL1357) (3 credits)

The majority of Canadians experience criminal victimization at some point in their lifetime. The meaning of the term victim is explored through theoretical perspectives and case studies. Students conduct critical analysis and learn research methods in the field of victimology. Students are introduced to victim classifications, community victimization, the link between victimization and offending and violence prevention strategies. Special attention is also given to the examination of the development of victims` rights at the regional, national and international level.

### Victimology: Assessment and Intervention (OEL1358) (3 credits)

Victim assistance workers must be able to plan and implement skills and techniques aimed at the prevention of crime and healing of victims. Students are introduced to the theoretical basis and practice of victim service interventions. Students learn to conduct threat assessments, triage, facilitation, mediation, negotiation, and non-violent crisis intervention. Special emphasis is placed on recognizing and addressing the acute needs of victims in crisis, and delivering interventions from a client-centred perspective.

#### Diversity and Victim Assistance (OEL1359) (2 credits)

Students develop the knowledge and skills required to provide culturally competent services to victims. Students explore the dynamics of difference from a personal and professional perspective. Emphasis is given to marginalized and minoritized populations. Through critical analysis and examination of core concepts (identity, equity, anti-oppression, reflective practice and cultural competency), students learn how to work with all populations requiring victim services while applying an anti-oppression framework.

# Wastewater Collection and Treatment System Operations

Section B.76 6/2/2020

Certificate (4145)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

This part-time online certificate program provides learners with the knowledge of practices, theories, and applications relevant to wastewater collection and treatment systems. Students will be introduced to concepts in wastewater treatment as applied to municipal and compatible industrial environmental systems, and will explore support systems mainly pertaining to pumps, motors, and processes in wastewater collection treatment. Graduates of this program will have sufficient knowledge to write various level certification examinations. Courses within this program may also be of interest to wastewater operators who are seeking continuing education units (CEUS) that are recognized by the Ontario Water Wastewater Certification Office (OWWCO).

#### **PROGRAM OUTCOMES**

Graduates will be able to:

- 1. Formulate unit conversions and area and volume calculations of various devices and pipes in water and wastewater systems.
- 2. Have good working knowledge in math, biology, chemistry, hydraulics and electricity as applicable to wastewater systems.
- 3. Calculate area and volume as related to wastewater operations and devices.
- 4. Apply the principles of hydraulics to find flow rates, pressures and pumping head and power in wastewater flow systems.
- 5. Calculate the operating efficiency of pump and determine its performance; determine pump power for given operating conditions.
- 6. Understand operation of pumps and motors.
- 7. Understand basic elements of electricity and electric motors.
- 8. Identify the parameters of wastewater quality and sampling requirements for compliance and process control.
- 9. Describe the basic principles of safety as applied to wastewater operations.
- 10. Describe the main processes and operations employed in wastewater collection.
- 11. Explain the processes and equipment employed in wastewater treatment systems.
- 12. Describe main preciseness for sludge treatment and disposal.

# **ADMISSIONS**

### MINIMUM ACADEMIC REQUIREMENTS

- Ontario Secondary School Diploma with Grade 12 U or C Math (e.g. MCT4C)
- Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate

# **CAREER PATHS**

This certificate is intended for those wanting to work in the wastewater industry as well as current wastewater operators seeking continuing education credits.

Potential careers in the wastewater industry include: wastewater treatment operator, wastewater collection operator, field technician, environmental inspector, sampling technician, laboratory technician, municipal inspector, and sales persons.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: http://www.jobbank.gc.ca.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL860-4 Wastewater Operator-in-Training Certification Preparation OEL862-4 Wastewater Treatment Certification Level I & II OEL867-4 Wastewater Treatment Certification Level III & IV OEL868-4 Applied Math for Water and Wastewater Operations OEL869-4 Applied Hydraulics for Water and Wastewater Operations OEL871-4 Wastewater Collection Certification Level I & II

# **Course Descriptions**

#### Semester 1

#### Wastewater Operator-in-Training Certification Preparation (OEL860) (4 credits)

This course is intended to provide the students with basics as related to the operation of wastewater collection and treatment systems. The basics as related to topics including conversions, math, chemistry, hydraulics, electricity will be discussed first. It will be followed by topics on support systems mainly pertaining to pumps and motors and processes in wastewater collection and wastewater treatment. At the end of the course, students will be prepared to write the operator in training certification examination of the Ministry of the Environment, Conservation and Parks

#### Wastewater Treatment Certification Level I & II (OEL862) (4 credits)

This is an introductory course in water treatment and present basic knowledge and practices, theories, and application relevant to wastewater flows and characteristics, basic treatment processes, and plant operations. Main topics include wastewater characteristics, preliminary treatment, primary treatment, stabilization ponds, secondary treatment, sludge processing and disinfection. Related concepts in chemistry, math, hydraulics, equipment, safety legislation are reinforced.

#### Wastewater Treatment Certification Level III & IV (OEL867) (4 credits)

The purpose of this course is to present advanced knowledge of practices, theories, and applications relevant to wastewater flows and characteristics, treatment processes, and plant operations. Topics covered in Wastewater Treatment Certification Level I & II including activated sludge process, disinfection, sludge processing and plant operation are covered in more detail and depth. This will prepare students to write the higher level certification examinations.

#### Applied Math for Water and Wastewater Operations (OEL868) (4 credits)

This course is intended to provide the students with math basics as applicable to the operation of water and wastewater systems. The basic concepts in unit conversions, area, volume calculations, and density are discussed first. Based on this, students are introduced to the use of math to understand chemistry math under the topics of concentration, feed solutions, liquid chemicals, molarity, normality and organic loading. The main objective of the course is to lay a sound foundation in math and chemistry concepts as required to understand and apply to the operation of water and wastewater systems. This will allow students to get ready for the math component in various levels of operator certification examinations of the Ministry of the Environment, Conservation and Parks.

### Applied Hydraulics for Water and Wastewater Operations (OEL869) (4 credits)

This course is intended to provide students with basics of hydraulics as applicable to the operation of water and wastewater systems. The basic concepts in flow, detention time, pressure, energy, head and power are discussed first. Based on this, students are introduced to the use of continuity and energy concepts. The application of continuity and energy equation is illustrated by numerical problems from the areas of water and wastewater. The main objective of the course is to lay a sound foundation in hydraulics concepts as required to understand and apply to the operation of water and wastewater systems. This will help prepare students for the hydraulic component in various levels of operator certification examinations of the Ministry of the Environment, Conservation and Parks.

# Wastewater Collection Certification Level I & II (OEL871) (4 credits)

This course prepares the participants to gain knowledge in the field of wastewater collections as pertains to municipal sewer systems. Students will be provided an introduction related to wastewater sources and wastewater characteristics and basic hydraulic concepts. Main topics include system components of sanitary sewer systems, sewer pipes and sewage pumping stations, maintenance and operation of wastewater collection system is also discussed..

# Water Treatment and Distribution System Operations

Section B.77 6/2/2020

Certificate (4135)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

This part-time online certificate program provides learners with the knowledge and skills required to work in the water treatment operations industry, an industry which plays a critical role in protecting public health and the natural environment through the responsible treatment of drinking water. To enter the operating profession, individuals must become certified. Graduates of this program will have sufficient knowledge to write various level certification examinations. Courses within this program may also be of interest to water operators who are seeking director-approved continuing education units (CEUS) that are recognized by the Ontario Water Wastewater Certification Office (OWWCO).

Note: learners interested in obtaining Class 1 certification must complete the Entry-Level Course (ELC) for Drinking Water Operators which is a mandatory course, developed by the Ministry of?Environment, Conservation and Parks, for all drinking water operators. The ELC course is <u>not</u> included in this certificate program but can be completed via the Walkerton Clean Water Centre (https://wcwc.ca/).

Learners must complete six compulsory courses listed below

- OEL868 Applied Mathematics for Water and Wastewater Operations
- OEL859 Drinking Water Operator-in-Training Certification Preparation
- OEL861 Water Treatment Certification Level I and II
- OEL869 Applied Hydraulics for Water and Wastewater Operations
- OEL870 Water Distribution Certification Level I & II
- OEL866 Water Treatment Certification Level III & IV

#### **PROGRAM OUTCOMES**

Graduates will be able to:

- 1. Formulate unit conversions and area and volume calculations of various devices and pipes in water and wastewater systems.
- 2. Differentiate between SI and USC systems of measurement; mass and weight terms.
- 3. Calculate concentration, feed solution rate, amount of liquid chemical required to prepare solutions of given strength, molarity, normality and organic loading.
- 4. Apply the principles of hydraulics to find flow rates, pressures and pumping head and power in water flow systems.
- 5. Calculate the operating efficiency of pump and determine its performance; determine pump power for given operating conditions.
- 6. Operate pumps, motors, valves and other commonly used devices in water systems.
- 7. Identify safety and water legislation.
- 8. Identify the principles and importance of disinfection of water in relation to parameters of water quality and sampling requirements for compliance and process control.
- 9. Describe the main processes and operations employed in water treatment and explain the processes and equipment employed in water distribution systems.
- 10. Describe the principle of coagulation and flocculation and factors affecting these processes.

- 11. Explain sedimentation and understand the importance of filtration and basic components.
- 12. Describe various methods of disinfecting water and familiarization with miscellaneous methods including, softening and iron removal.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

- Ontario Secondary School Diploma with Grade 12 U or C Math (e.g. MCT4C).
- Students must successfully complete all courses within 7 years of acceptance into the program in order to graduate.
- Students must obtain a G.P.A. of 2.0 or 60% or higher to obtain this certificate.

# **CAREER PATHS**

This certificate is intended for those wanting to work in the water industry as well and for current water operators in the water industry who are seeking professional development opportunities. This certificate can open doors that will lead to a variety of careers in the drinking water industry and those completing it will have potential to be a vital member of the water operations team.

Employment areas include: water treatment operator, water distribution operator, field technician, environmental inspector, sampling technician, and municipal inspector.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: http://www.jobbank.gc.ca.

# **PROGRAM OF STUDY**

### **SEMESTER 1**

OEL859-4 Drinking Water Operator-in-Training Certification Prep OEL861-4 Water Treatment Certification Level I & II OEL866-4 Water Treatment Certification Level III & IV OEL868-4 Applied Math for Water and Wastewater Operations OEL869-4 Applied Hydraulics for Water and Wastewater Operations OEL870-4 Water Distribution Certification Level I & II

# **Course Descriptions**

#### Semester 1

Drinking Water Operator-in-Training Certification Prep (OEL859) (4 credits)

This course is intended to provide you with basics as related to the operation of water treatment and distribution systems. The basic concepts in science and math are discussed first. This is covered under topics including: conversions, math, chemistry, hydraulics, electricity. It will be followed by topics on support systems mainly pertaining to pumps and motors and processes in water treatment and water distribution. At the end of the course you will be fully prepared to write the OIT certification examination of the Ontario Ministry of Environment. (Director Approved CEU 6.0, Course Id:11896)

### Water Treatment Certification Level I & II (OEL861) (4 credits)

In this course, students review the material related to basic sciences, math and hydraulics and support systems as done in earlier courses. After review, students are presented with knowledge and practices,

theories and applications relevant to sources of water supply, treatment processes, quality parameters and plant operations.

# Water Treatment Certification Level III & IV (OEL866) (4 credits)

The purpose of this course is to present advanced knowledge and practices, theories, and applications relevant to wastewater flows and characteristics, treatment processes, and plant operations. Topics covered in Wastewater Treatment Certification Level I & II are covered in more detail and depth. This will prepare students to write the higher level certification examinations.

### Applied Math for Water and Wastewater Operations (OEL868) (4 credits)

This course is intended to provide the students with math basics as applicable to the operation of water and wastewater systems. The basic concepts in unit conversions, area, volume calculations, and density are discussed first. Based on this, students are introduced to the use of math to understand chemistry math under the topics of concentration, feed solutions, liquid chemicals, molarity, normality and organic loading. The main objective of the course is to lay a sound foundation in math and chemistry concepts as required to understand and apply to the operation of water and wastewater systems. This will allow students to get ready for the math component in various levels of operator certification examinations of the Ministry of the Environment, Conservation and Parks.

# Applied Hydraulics for Water and Wastewater Operations (OEL869) (4 credits)

This course is intended to provide students with basics of hydraulics as applicable to the operation of water and wastewater systems. The basic concepts in flow, detention time, pressure, energy, head and power are discussed first. Based on this, students are introduced to the use of continuity and energy concepts. The application of continuity and energy equation is illustrated by numerical problems from the areas of water and wastewater. The main objective of the course is to lay a sound foundation in hydraulics concepts as required to understand and apply to the operation of water and wastewater systems. This will help prepare students for the hydraulic component in various levels of operator certification examinations of the Ministry of the Environment, Conservation and Parks.

# Water Distribution Certification Level I & II (OEL870) (4 credits)

This course is intended to provide participants with an understanding of key concepts related to the operation of distribution water systems. Basic technical concepts related to drinking water distribution will be introduced such as unit conversions, graph reading and preparation, water chemistry, hydraulics and electricity. Other topics include sources of water supply, components of water distribution system, water quality monitoring, water wells and requirements for quality monitoring.

*Note: This course is <u>not</u> a replacement for the Entry Level Course (ELC) course, offered by the Walkerton Clean Water Centre, which is required to obtain the Class 1 certificate.* 

# Web Development Essentials

Section B.78 6/2/2020

Certificate (Part-time Continuing Education ) (4054) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

The Internet and the World Wide Web have transformed our lives; from surfing the net to performing business transactions. There is a growing demand for computer professionals who know how to design, develop, and maintain web sites. Become part of this dynamic growing and changing field.

All courses are offered online via the internet. Online courses begin every January, May and September. Some courses are also offered starting each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

# **ADMISSIONS**

### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma (OSSD) or mature student status.

# **CAREER PATHS**

Employment settings include Website developer for businesses or individuals, Internet Marketing, Small business owner or employee, Graphic design, Independent website consulting, or employment in an IT department.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca</u>

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1005-4 Dynamic Web sites with AMP (Apache, MySQL and PHP) OEL102-2 Access Core OEL1087-3 MySQL Databases OEL1088-3 Design Basics OEL1089-2 Web Usability - Writing & Design OEL1090-4 Javascript OEL1091-3 HTML Intermediate OEL1259-3 Adobe Photoshop 1 OEL329-2 Dreamweaver, An Introduction OEL613-3 HTML Introduction

# **Course Descriptions**

#### Semester 1

### Dynamic Web sites with AMP (Apache, MySQL and PHP) (OEL1005) (4 credits)

This specialized programming course teaches you server side web development using industry leading server technology. You will create dynamic web pages using PHP, the Canadian high level language that has been adopted internationally as the primary server side programming language for the creation of commercial web sites. You will install the Apache web server and the MySQL database server and learn to interact with Apache and MySQL via PHP.

### Access Core (OEL102) (2 credits)

Learn to use MS Access for Windows. You will learn to use Microsoft Access using its pull-down menus, toolbars and dialog boxes. Access is a computerized database that allows you to manipulate, link, chart, query and report your data to customize the information you need. Access creates a system of relational database management in a user-friendly environment.

### MySQL Databases (OEL1087) (3 credits)

Focus is on creation, modification, implementation, and maintenance of MySQL and MSSQL databases, as well as how these databases interface with internet applications and database servers.

### Design Basics (OEL1088) (3 credits)

Have you ever needed to design your own business card or a flyer for an event? If so, this is the course for you. Design Basics will give you the building blocks of design. You will learn about fonts, different layout techniques, and simple layout concepts essential to effective graphic design.

# Web Usability - Writing & Design (OEL1089) (2 credits)

Focus is on creating audience appropriate, user friendly dynamic web sites. You will discover how to use flow charts and navigational plans to design the framework for your sites. Learn how to rewrite print based copy for use on the web, establish content guidelines and create sites that are accessible, usable and flexible. Analyze web site audiences and apply web usability testing principles and site metrics to ensure good website design and traffic flow.

### Javascript (OEL1090) (4 credits)

This subject introduces you to computer programming using the JavaScript programming language. While JavaScript is the language of instruction, the course covers the essential concepts and constructs which are part of most modern programming languages, including sequence, selection, repetition, variables, arrays, and objects. This course leads you from writing the simplest of programs to creating programs that interact with the elements in a web page. Using only a simple text processor and a browser, you will write and run programs that utilize variables, calculations, arrays, if statements, loops, object, and events. In addition to writing programs, you will also be instructed in the elements of good programming style and their importance.

### HTML Intermediate (OEL1091) (3 credits)

Applying your knowledge of HTML and web page design this course covers Dynamic HTML. Topics covered include Cascading Style Sheets, controlling content dynamically, positioning with DHTML, implementing advanced DHTML features and structuring data with XML.

### Adobe Photoshop 1 (OEL1259) (3 credits)

This course will develop the student?s design and image creation skills using Adobe Photoshop. The student will be able to source images, create, develop, and assess various design solutions and execute projects in a professional manner.

### Dreamweaver, An Introduction (OEL329) (2 credits)

This course will provide an introduction to Dreamweaver including: understanding and customizing the DW working environment, creating sites and documents, linking and navigation, site management, typography, images, tables, using layers, using frames, creating forms. Advanced topics will include CSS (cascading style

sheets), rollovers and behaviours.

### HTML Introduction (OEL613) (3 credits)

Students will learn some of the most important topics of HTML, from the basics of creating Web pages with graphics and links, using tables, and controlling page layout with frames, to more advanced topics including cascading style sheets, adding pre-written JavaScript to your HTML documents, creating a multimedia Web page, and creating a Web page with forms.

# Working with Dementia

Certificate (Part-time Continuing Education ) (3053) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Working with Dementia Certificate program is designed for paraprofessionals and volunteers who are interested in building knowledge, skills and competencies to care for those with dementia. The goal of the program is to enhance the quality of life for those with dementia, caregivers and families.

Thisis a part-time program that is offered online via the internet, while the final course (WWD104) is offered via independent study and can be started at any time. Online courses begin every January, May and September. Some online courses begin each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

# **CAREER PATHS**

Graduates will have a specialized understanding of dementia to contribute enhancing the quality of life of those living with dementia.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: <u>https://www.jobbank.gc.ca/</u>

# **CLINICAL/LAB OR FIELD PLACEMENTS**

Fieldwork experience provides the student with the opportunity to apply classroom theory to an actual employment situation. Students with experience in the dementia field may apply for prior learning assessment (PLAR).

All applicants with be required to submit documentation of having completed the following procedures prior to entering clinical/lab, identified courses and/or field placement components of the program. If the appropriate documentation is not received with at least two weeks before the start of the identified clinical/lab/course and/or field placement, it may be necessary to withdraw the student from the course.

- A current (within six months) Police Record Search. This is required by students as they are enrolled in a program during which they will have unsupervised access to vulnerable persons
- Immunization and Heath Record Form. This form includes the following immunization requirements:, Two-step TB test, Immunity against measles, mumps and rubella, current tetanus,

diphtheria immunization, current influenza immunization.

- Statement of Confidentiality Form, WSIB, and Workplace Agreement Form. These forms will be given to you to sign prior to your fieldwork placement.
- WHMIS.

All costs associated with these requirements are the responsibility of the student.

# **PROGRAM OF STUDY**

### **SEMESTER 1**

OEL1158-2 Creating a Dementia Care Skill Kit OEL1159-2 Empowerment in Dementia Care OEL1284-2 Communication and Interpersonal Skills OEL566-2 Overview of Dementia Care WWD104-4 Field Placement: Working with Dementia

# **Course Descriptions**

#### Semester 1

#### Creating a Dementia Care Skill Kit (OEL1158) (2 credits)

This course allows participants to explore a variety of dementia care skills including creating meaningful programs and activities, therapeutic caregiving strategies, needs communication messaging models (NCM), life stories, and compassionate communication.

#### Empowerment in Dementia Care (OEL1159) (2 credits)

Examine ways that caregivers and those with dementia can ensure, maintain and enhance their quality of life. Topics include end-of-life care, development and traning, caregiver integrity, affecting change in the workplace, work-life balance.

#### Communication and Interpersonal Skills (OEL1284) (2 credits)

Specific communication skills are required throughout the progressive stages of dementia. Dementia-specific approaches to communication, problem solving and cueing are reviewed. Working in teams, with families, and interagency partners to effect change and ensure quality programming for dementia clients are explored.

#### Overview of Dementia Care (OEL566) (2 credits)

Normal aging versus dementia will be discussed including secondary influences along with a focus on assessment and diagnosis. The main emphasis of this course will be on philosophy of care, i.e. providing a holistic model of care within the existing medical model. Appropriate physical and emotional environment, effects of disease on caregiver and client, the family unit, role of research on caregiving, importance of ongoing education to maintain competence, etc., will be discussed.

#### Field Placement: Working with Dementia (WWD104) (4 credits)

This course is designed to allow participants to gain exposure to agencies, organizations and staff currently providing care to dementia clients in order to increase competency and skill in care for those clients.

# **Culinary Management**

**Ontario College Diploma (2 Years - 4 Semesters ) (2078)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada





# **PROGRAM OVERVIEW**

Sault College's Culinary Management program teaches you everything you need to know to develop a career as a Chef. Food demonstrations, lab work and lectures provide a dynamic learning environment. You will learn about contemporary and classical techniques, menu planning and food and beverage management. Opportunity for experiential learning takes place during the paid summer CO-OP placement, which enables you to hone your skills. Upon successful completion of your studies you will have the necessary tools to work within various sectors of the food-service industry.

# **PROGRAM OUTCOMES**

# A graduate of the Culinary Management Program at Sault College will reliably demonstrate the ability to:

- 1. Provide advanced culinary planning, preparation and presentation for a variety of food service environments using a range of classical and contemporary techniques.
- 2. Apply basic and advanced food and bake science to food preparation to create a desired end product.
- 3. Contribute to and monitor adherence of others to the provision of a well maintained kitchen environment and to the service of food and beverage products that are free from harmful bacteria or other contaminants, adhering to health, safety, sanitation and food handling regulations.
- 4. Ensure the safe operation of the kitchen and all aspects of food preparation to promote healthy work spaces, responsible kitchen management and efficient use of resources.
- 5. Create menus that reflect knowledge of nutrition and food ingredients, promote general health and well-being, respond to a range of nutritional needs and preferences and address modifications for special diets, food allergies and intolerances, as required.
- 6. Apply business principles and recognized industry costing and control practices to food service operations to manage and promote a fiscally responsible operation.
- 7. Apply knowledge of sustainability\*, ethical and local food sourcing, and food security to food preparation and kitchen management, recognizing the potential impacts on food production, consumer choice and operations within the food service industry.
- 8. Select and use technology, including contemporary kitchen equipment, for food production and promotion.
- 9. Perform effectively as a member of a food and beverage preparation and service team and contribute to the success of a food-service operation by applying self-management and interpersonal skills.
- 10. Develop strategies for continuous personal and professional learning to ensure currency with and responsiveness to emerging culinary techniques, regulations, and practices in the food service industry.
- 11. Contribute to the development of marketing strategies that promote the successful operation of a food service business.
- 12. Contribute to the business management of a variety of food and beverage operations to foster an engaging work environment that reflects service excellence.

#### \*Reference

The approved program standard for Culinary Management program of instruction leading to an Ontario College Diploma delivered by Ontario Colleges of Applied Arts and Technology (MTCU funding code 53107) Ministry of Advanced Education and Skills Development. August 2016.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C and Grade 11 Foundations for College Math (C) MBF3C, or mature student status.

# **CAREER PATHS**

Graduates of the Culinary Management program may find employment in resorts, hotels, restaurants, health care facilities, cruise lines, catering services, private clubs and industrial kitchens in advanced positions depending upon their work experience and completion of the apprenticeship training.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,812.00	\$15,180.80	\$2,272.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **DRESS CODE**

#### **Requirements in Labs:**

- 1. Clean uniform required daily purchase three complete sets of uniforms (coat, checkered pants, necktie, apron & chef's hat)
- 2. Side towels (4) to be purchased
- 3. Black non-slip shoes
- 4. Assigned Knife Kit

For a complete list of required supplies, etc., see the Books and Supplies list available online.

In order to abide by the Provincial Health Regulations, students must have their hair controlled above the collar and hairnet must be used while in the food preparation areas. Students must be clean-shaven. Beards and/or moustaches may be permitted if they are trimmed and neatly maintained at the criteria of the Hospitality Department and health regulations regarding hair control.

# **CLINICAL/LAB OR FIELD PLACEMENTS**

You will be required to complete the WHMIS Certificate and your Algoma Public Health Safe Food Handler's Certificate prior to September 30th of the third semester. Additionally, a Criminal Record Check may be required by the industry placement.

Students gain valuable experience through participation in special events put on by the College and local industry.

# **OTHER INFORMATION**

This is a co-operative education program. Students are required to complete at least one co-op work placement (CWR100) in order to graduate.

For more information contact Program Coordinator Sarah Birkenhauer at 705.759.2554 ext 2588 or email sarah.birkenhauer@saultcollege.ca.

### **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM510-2 Professional Communication CUL100-8 Culinary Techniques I CUL101-2 The Theory of Food CUL102-3 Culinary Math & Computer Apps for Trade CUL103-3 Nutrition and Wellness CUL104-4 Culinary Food Production

#### **SEMESTER 2**

CUL150-8 Culinary Techniques II CUL151-3 Culinary Cost Control CUL152-4 Fundamentals of Professional Baking CUL153-3 Gastronomy and Food Sustainability CUL154-3 Contemporary Food Production CWR100-3 Co-op Placement I **Note:** CWR100-3 is mandatory and takes place in the summer. GEN100-3 Global Citizenship

### **SEMESTER 3**

CUL200-3 Culinary Marketing and Sales CUL201-4 Exploring International Cuisine CUL202-4 Modern Baking and Pastry CUL203-3 Menu Planning and Development CUL204-3 Hospitality Human Resources CUL205-4 Integrated Culinary Production and Supervision

#### **SEMESTER 4**

CUL250-3 Food Composition and Plating Techniques CUL251-8 Practical Culinary Skills and Supervision CUL252-3 Hospitality Entrepreneurship and Law CUL253-4 Food and Wine Pairing CUL254-3 Special Event Management

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **PROGRAM OF STUDY NOTES**

Note:

Common Year with Culinary Skills - Chef Training Semesters I and 2.

# **Course Descriptions**

#### Semester 1

### Professional Communication (CMM510) (2 credits)

This course helps students develop professional communication skills required for success in the Hospitality and Tourism industry. Assignments involve various modes of communication, including writing, with a focus on program-related materials and expectations. With opportunities to use computers and other media, students create effective job search documents, develop interview skills, and identify career pathway possibilities. Emphasis is placed on integrating positive and inclusive language, listening to client needs, and developing error-free, effective communications.

### Culinary Techniques I (CUL100) (8 credits)

Building a sound foundation in culinary skills is essential when preparing to enter the culinary industry. This course is an introduction to the application and development of fundamental cooking theories and techniques. Students will develop solid rudimentary culinary techniques and practices through viewing a variety of food demonstrations and recreating these within a lab setting. Topics of study include tasting, kitchen equipment, knife skills, classic vegetable cuts, stocks production, thickening agents, soup preparation, mother and derivative sauces, and breakfast cookery. This course also introduces students to fundamental concepts and techniques of basic protein, starch and vegetable cookery.

### The Theory of Food (CUL101) (2 credits)

Having a theoretical knowledge base of professional culinary terminology, food principles and common kitchen practices is essential for every cook. Students will learn to identify different quality food ingredients, explore principles of cooking, recognize a variety of cooking methodologies and examine food flavour pairings. Topic areas to be explored are: kitchen safety and sanitation, stocks, soup, sauces, breakfast, vegetables, potatoes, grains, pasta, legumes, poultry, meat products, fish and shellfish.

### Culinary Math & Computer Apps for Trade (CUL102) (3 credits)

This course will provide students with the essential numeric and computer skills required to perform effectively and efficiently within the trade. Students will apply basic math skills including fractions, decimals and percents and perform calculations pertaining to standard units of measure, unit conversion, portion and recipe costing.? Microsoft office will be used in the creation of spreadsheets, recipe portfolios and to perform basic word processing tasks as they relate to the food industry.

### Nutrition and Wellness (CUL103) (3 credits)

Nutrition plays a vital role in menu selection for todays restaurant clientele. In this course, students will gain a foundational understanding of nutrition as applied to dietary concerns, menu selection and clients needs. Students will also acquire knowledge of basic nutrients, food labeling, nutritional principles and analysis and the application of these to recipes and menu development.

### Culinary Food Production (CUL104) (4 credits)

Culinary Food Production will introduce students to multi-course menus with emphasis placed on batch cooking as executed in an la carte-style service. This hands-on culinary lab will teach students to work and communicate effectively in a team setting. Students will have three hours to complete mise en place, create and package current culinary meals, to be featured in our program store Gourmet 2 Go. This course provides an excellent opportunity to practice and further develop the culinary skill set.? Students will hone critical thinking and problem solving skills by executing individual work plans that exercise proper time management, demonstrate the ability to multi-task and collaborate with classmates for a successful restaurant service.

# Semester 2

# Culinary Techniques II (CUL150) (8 credits)

Building on Culinary Techniques I and in preparation for successful employment in todays food service industry, students will broaden their culinary skills at an advanced level focusing upon concepts and techniques of protein, starch and vegetable cookery. Students will observe a series of cooking demonstrations and prepare and execute work plans within the culinary lab that reflect an advanced skill competency.

# Culinary Cost Control (CUL151) (3 credits)

Whether you manage or own a restaurant, operate a catering business or embrace the food truck craze, there are fundamental management skills that apply to all foodservice operations. This essential course introduces students to management principles and the theoretical applications of food, beverage and labour cost controls. Students will examine various aspects used within the industry to evaluate, monitor and maintain appropriate control policies and procedures through the various functioning centres of purchasing, receiving, storing and issuing. Additionally, students will develop standard recipes and requisitions, practice menu engineering, examine break-even analysis and perform yield tests, cost/sale and inventory calculations.

### Fundamentals of Professional Baking (CUL152) (4 credits)

This course is designed to provide students with the essential knowledge, skills and techniques of baking and pastry arts. Learning is comprised of hands-on practical baking labs that introduce students to the fundamental ingredients, techniques and procedures used in the bake industry. A series of in-lab baking demonstrations will emphasize the importance of understanding the function of ingredients in a range of basic baked products. With knowledge acquired from these demonstrations, students will produce assorted yeast products, quick breads, cookies, choux paste, puff pastry, sponge based pastries, and a variety of pies, tarts and flans.

### Gastronomy and Food Sustainability (CUL153) (3 credits)

Food is critical to the culture of society. In this course, students will study the social, historical and cultural connections to how society interacts with food by investigating the impact of lifestyle, commerce and politics in key global regions. Students will learn how agriculture, religion, history and environmental sustainability influence the characteristics of a culture and its food. Todays customers value health and wellness. The food service industry must respond with menu options that highlight nutritious, ethically sourced, sustainable products. Students will develop the knowledge to successfully identify and create menu options that meet the diverse needs of todays society.

# Contemporary Food Production (CUL154) (3 credits)

Contemporary food production will further develop the skills, techniques and kitchen practices learned

within Culinary Food Production. This hands-on culinary lab will expose students to the advanced styles of cooking and cooking techniques found in a variety of cuisines. Students will further develop their ability to organize an assigned station based on preparation methods while focusing on the production of advanced menu items, plate presentations and cooking techniques. Second year students will assist in the supervision of production and food presentation for the supply of food in our program store Gourmet 2 Go.

## Co-op Placement I (CWR100) (3 credits)

The student will acquire culinary work experience in various areas of the restaurant, resort or hotel environment. This industry experience, combined with post secondary education, continues to be highly valued by employers. The Co-op placement provides a training ground for the students to apply their skill sets developed in the first year of the Culinary Management Program. Particular emphasis is placed on the importance of interpersonal, teamwork, technical, and leadership skills as they meet the daily challenges of a dynamic customer-focused environment. The work experience, coupled with the skills and knowledge developed through their coursework, places our graduates in the best possible position to develop a successful management career within the culinary industry.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 3

## Culinary Marketing and Sales (CUL200) (3 credits)

This course will focus on analyzing contemporary marketing concepts, theories and strategies to successfully market and promote a food and beverage operation, product, service and ones self as a culinary professional.? Students will perform market research and analysis and learn to identify suitable target markets. In addition, students will develop the knowledge and skills to plan, implement and evaluate detailed marketing plans.

## Exploring International Cuisine (CUL201) (4 credits)

This course introduces students to a variety of regional, national and international foods. Students will have the opportunity to research different cultural traditions, demographics and physical elements which ultimately define a food culture. Emphasis will be placed on exploring cuisine specific ingredients, diverse flavour profiles and cooking techniques utilized to prepare dishes that are representative to a specific cultural region and/or cuisine. Students will prep, cook and package these meals within the lab component of this course, which in turn will be featured in our program store Gourmet 2 Go.

## Modern Baking and Pastry (CUL202) (4 credits)

This course will continue to develop and expand students baking and pastry knowledge and practical techniques through a series of theoretical lessons, demonstrations and laboratory classes. Students will build upon their skills to produce sophisticated finished products and contemporary plating techniques and designs. Students will produce and plate frozen confections, cheesecake, souffl, cake, icings, petit fours, fruit coulis and purees, and custards and creams.

## Menu Planning and Development (CUL203) (3 credits)

The ability to create well-balanced menus for a variety of occasions that meet the diverse needs of customers, and that are operationally functional and profitable is paramount to the success of any business. This course will highlight the basic principles of developing menus that reflect proper descriptive terminology and comply with truth in menu guidelines. Students will gain an understanding of the importance of product and traffic flow, facility layout, equipment and product availability, demographics and market demand on the menu planning process.

## Hospitality Human Resources (CUL204) (3 credits)

This course provides an introduction to the essential administrative duties encountered when managing staff in the food and beverage industry. Students will examine current human resource legislation, multicultural management, recruitment strategies, interview guidelines and techniques, orientation and training strategies, employee responsibilities, scheduling and compensation opportunities. Emphasis will be placed on the importance of policies, procedures and standardization.

## Integrated Culinary Production and Supervision (CUL205) (4 credits)

This course provides students with the opportunity to cultivate their interpersonal communication and critical thinking skills by practicing within a context closely resembling that of the private culinary sector. Students work in a supervisory capacity to ensure the kitchen is operating at optimal efficiency. Students utilize developing skills to ensure the operation is consistent with proper cost control principles and that fellow classmates are adhering to kitchen and foods safety practices. Students will develop work plans to complete mise en place, create and package culinary meals for the program store Gourmet 2 Go. ?Students will also create menus and work plans to implement in the advanced semester.

## Semester 4

## Food Composition and Plating Techniques (CUL250) (3 credits)

The ability to quickly and accurately assess resources, plan and create contemporary cuisine is a crucial skill. Employees working within the culinary industry typically have the opportunity to develop daily feature menu items. This advanced level course will work off the premise of a black box challenge. Students will work with minimal supervision to showcase their developed culinary skill sets by preparing, plating and presenting modern dishes that demonstrate sound culinary knowledge, judgement and technique.

## Practical Culinary Skills and Supervision (CUL251) (8 credits)

This advanced course builds upon learning from Integrated Culinary Production and Supervision by providing students with the opportunity to further cultivate their interpersonal communication and critical thinking skills. By applying advanced skills, students will work with increasing autonomy to supervise optimal efficiency of kitchen operations. Students will monitor and direct fellow classmates to adhere to current cost control principles and kitchen and food safety practices. Additionally, students will develop and implement feature menus and provide work plans to complete mise en place, create and package culinary meals for the program store Gourmet 2 Go.?

## Hospitality Entrepreneurship and Law (CUL252) (3 credits)

Students are introduced to basic concepts related to entrepreneurship and hospitality law. This must-have course introduces students to the concepts of guest liability and the risks associated with the hospitality industry, as well as the strategies and best practices used to reduce such liabilities. Furthermore, the content of the course will focus specifically on the rights, obligations and liabilities of a business owner. Students will develop the skillset to successfully prepare a business plan for opening or maintaining a small business.

## Food and Wine Pairing (CUL253) (4 credits)

Become a wine enthusiast and decipher the many complexities revealed in wine by developing the ability to pair food and wine in todays culinary world. Whether planning to entertain in the comfort of ones home, preparing for a business dinner meeting or developing food and wine menus for restaurants or special events, understanding how to pair food and wine is invaluable and a life skill. This course will explore the significance of food and drink by examining fundamental concepts of wine history, tradition and culture. Students will learn about terroir, wine terminology, production, storage, selection and how wine is properly served.?

??????? In conjunction with wine education, culinary students will participate in a variety of hands-on labs that will explore the complexities of wine and its interactions with food. Students will prepare and sample a variety of diverse food and wines and prepare a variety of appetizers to match with selected wines and host a food and wine tasting event.

## Special Event Management (CUL254) (3 credits)

In this advanced level course, students will acquire knowledge and examine methods for achieving maximum customer satisfaction and profitability for special events. Students will experience first-hand, the knowledge and skills required to successfully propose, organize and execute the delivery of a special event. Students will gain practical experience through the conception, organization, marketing, costing, preparation and service of college events. Students will contribute to the creation of event menu items that reflect proper cost control practices and take into account customer requests, product availability, special dietary requests and restaurant and staff capabilities.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Culinary Skills - Chef Training

Ontario College Certificate (1 Year - 2 Semesters ) (1071) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

Sault College's one year Culinary Skills - Chef Training certificate program will teach you about contemporary and classical cooking, for small and large groups of customers. Enjoy a combination of theoretical and practical instruction through live demonstrations, food tastings and hands-on training in various culinary labs.

If you are a Canadian citizen or permanent resident and are currently unemployed, you may qualify for <u>second career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

## **PROGRAM OUTCOMES**

## A graduate of the Culinary Skills Chef Training Program at Sault College will reliably demonstrate the ability to:

- 1. Provide fundamental culinary preparation and presentation for a variety of food service environments using a range of classical and contemporary techniques.
- 2. Apply basic food and bake science to food preparation to create a desired end product.
- 3. Contribute to and monitor adherence of others to the provision of a well-maintained kitchen environment and to the service of food and beverage products that are free from harmful bacteria or other contaminants, adhering to health, safety, sanitation and food handling regulations.
- 4. Ensure the safe operation of the kitchen and all aspects of food preparation to promote healthy work spaces and the responsible, efficient use of resources.
- 5. Support the development of menu options that reflect knowledge of nutrition and food ingredients, promote general health and well-being, respond to a range of nutritional needs and preferences and address modifications for special diets, food allergies and intolerances, as required.
- 6. Apply fundamental business principles and recognized industry costing and control practices to food service operations to promote a fiscally responsible operation.
- 7. Apply basic knowledge of sustainability\*, ethical and local food sourcing, and food security to food preparation and kitchen management, recognizing the potential impacts on food production, consumer choice and operations within the food service industry.
- 8. Use technology, including contemporary kitchen equipment, for food production and promotion.
- 9. Perform effectively as a member of a food and beverage preparation and service team and contribute to the success of a food-service operation by applying self-management and interpersonal skills.
- 10. Develop strategies for continuous personal and professional learning to ensure currency with and responsiveness to emerging culinary techniques, regulations, and practices in the food service industry.

## \*Reference

The approved program standard for the Culinary Skills program of instruction leading to an Ontario College Certificate delivered by Ontario Colleges of Applied Arts and Technology (MTCU funding code 43107) Ministry of Advanced Education and Skills Development. August 2016.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C and Grade 11 Foundations for College Math (C) MBF3C, or mature student status.

## **CAREER PATHS**

Graduates of the Culinary Skills - Chef Training program may find employment in resorts, hotels, restaurants, health care facilities, cruise lines, catering services, private clubs and industrial kitchens.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,567.00	\$15,180.80	\$2,027.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **DRESS CODE**

#### **Requirements in Labs:**

- 1. Clean uniform required daily purchase three complete sets of uniforms (coat, checkered pants, necktie, apron & chef's hat)
- 2. Side towels (4) to be purchased
- 3. Black non-slip shoes
- 4. Assigned Knife Kit

For a complete list of required supplies, etc., see the Books and Supplies list available online.

In order to abide by the Provincial Health Regulations, all students must have their hair controlled above the collar and hairnet must be used while in the food preparation areas. Students must be clean-shaven. Beards and/or moustaches may be permitted if they are trimmed and neatly maintained at the criteria of the Hospitality Department and health regulations regarding hair control.

## **OTHER INFORMATION**

For more information contact Program Coordinator Sarah Birkenhauer at 705.759.2554 ext 2588 or email sarah.birkenhauer@saultcollege.ca.

## **PROGRAM OF STUDY**

**SEMESTER 1** 

CMM510-2 Professional Communication CUL100-8 Culinary Techniques I CUL101-2 The Theory of Food CUL102-3 Culinary Math & Computer Apps for Trade CUL103-3 Nutrition and Wellness CUL104-4 Culinary Food Production

## **SEMESTER 2**

CUL150-8 Culinary Techniques II CUL151-3 Culinary Cost Control CUL152-4 Fundamentals of Professional Baking CUL153-3 Gastronomy and Food Sustainability CUL154-3 Contemporary Food Production GEN100-3 Global Citizenship

## **Course Descriptions**

## Semester 1

## Professional Communication (CMM510) (2 credits)

This course helps students develop professional communication skills required for success in the Hospitality and Tourism industry. Assignments involve various modes of communication, including writing, with a focus on program-related materials and expectations. With opportunities to use computers and other media, students create effective job search documents, develop interview skills, and identify career pathway possibilities. Emphasis is placed on integrating positive and inclusive language, listening to client needs, and developing error-free, effective communications.

## Culinary Techniques I (CUL100) (8 credits)

Building a sound foundation in culinary skills is essential when preparing to enter the culinary industry. This course is an introduction to the application and development of fundamental cooking theories and techniques. Students will develop solid rudimentary culinary techniques and practices through viewing a variety of food demonstrations and recreating these within a lab setting. Topics of study include tasting, kitchen equipment, knife skills, classic vegetable cuts, stocks production, thickening agents, soup preparation, mother and derivative sauces, and breakfast cookery. This course also introduces students to fundamental concepts and techniques of basic protein, starch and vegetable cookery.

## The Theory of Food (CUL101) (2 credits)

Having a theoretical knowledge base of professional culinary terminology, food principles and common kitchen practices is essential for every cook. Students will learn to identify different quality food ingredients, explore principles of cooking, recognize a variety of cooking methodologies and examine food flavour pairings. Topic areas to be explored are: kitchen safety and sanitation, stocks, soup, sauces, breakfast, vegetables, potatoes, grains, pasta, legumes, poultry, meat products, fish and shellfish.

## Culinary Math & Computer Apps for Trade (CUL102) (3 credits)

This course will provide students with the essential numeric and computer skills required to perform effectively and efficiently within the trade. Students will apply basic math skills including fractions, decimals and percents and perform calculations pertaining to standard units of measure, unit conversion, portion and recipe costing.? Microsoft office will be used in the creation of spreadsheets, recipe portfolios and to perform basic word processing tasks as they relate to the food industry.

## Nutrition and Wellness (CUL103) (3 credits)

Nutrition plays a vital role in menu selection for todays restaurant clientele. In this course, students will gain a foundational understanding of nutrition as applied to dietary concerns, menu selection and clients needs. Students will also acquire knowledge of basic nutrients, food labeling, nutritional principles and analysis and the application of these to recipes and menu development.

## Culinary Food Production (CUL104) (4 credits)

Culinary Food Production will introduce students to multi-course menus with emphasis placed on batch cooking as executed in an la carte-style service. This hands-on culinary lab will teach students to work and communicate effectively in a team setting. Students will have three hours to complete mise en place, create and package current culinary meals, to be featured in our program store Gourmet 2 Go. This course provides an excellent opportunity to practice and further develop the culinary skill set.? Students will hone critical thinking and problem solving skills by executing individual work plans that exercise proper time management, demonstrate the ability to multi-task and collaborate with classmates for a successful restaurant service.

## Semester 2

## Culinary Techniques II (CUL150) (8 credits)

Building on Culinary Techniques I and in preparation for successful employment in todays food service industry, students will broaden their culinary skills at an advanced level focusing upon concepts and techniques of protein, starch and vegetable cookery. Students will observe a series of cooking demonstrations and prepare and execute work plans within the culinary lab that reflect an advanced skill competency.

## Culinary Cost Control (CUL151) (3 credits)

Whether you manage or own a restaurant, operate a catering business or embrace the food truck craze, there are fundamental management skills that apply to all foodservice operations. This essential course introduces students to management principles and the theoretical applications of food, beverage and labour cost controls. Students will examine various aspects used within the industry to evaluate, monitor and maintain appropriate control policies and procedures through the various functioning centres of purchasing, receiving, storing and issuing. Additionally, students will develop standard recipes and requisitions, practice menu engineering, examine break-even analysis and perform yield tests, cost/sale and inventory calculations.

## Fundamentals of Professional Baking (CUL152) (4 credits)

This course is designed to provide students with the essential knowledge, skills and techniques of baking and pastry arts. Learning is comprised of hands-on practical baking labs that introduce students to the fundamental ingredients, techniques and procedures used in the bake industry. A series of in-lab baking demonstrations will emphasize the importance of understanding the function of ingredients in a range of basic baked products. With knowledge acquired from these demonstrations, students will produce assorted yeast products, quick breads, cookies, choux paste, puff pastry, sponge based pastries, and a variety of pies, tarts and flans.

## Gastronomy and Food Sustainability (CUL153) (3 credits)

Food is critical to the culture of society. In this course, students will study the social, historical and cultural connections to how society interacts with food by investigating the impact of lifestyle, commerce and politics in key global regions. Students will learn how agriculture, religion, history and environmental sustainability influence the characteristics of a culture and its food. Todays customers value health and wellness. The food service industry must respond with menu options that highlight nutritious, ethically sourced, sustainable products. Students will develop the knowledge to successfully identify and create

menu options that meet the diverse needs of todays society.

#### Contemporary Food Production (CUL154) (3 credits)

Contemporary food production will further develop the skills, techniques and kitchen practices learned within Culinary Food Production. This hands-on culinary lab will expose students to the advanced styles of cooking and cooking techniques found in a variety of cuisines. Students will further develop their ability to organize an assigned station based on preparation methods while focusing on the production of advanced menu items, plate presentations and cooking techniques. Second year students will assist in the supervision of production and food presentation for the supply of food in our program store Gourmet 2 Go.

#### **Global Citizenship** (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Hospitality and Tourism Management

Section B.82 6/2/2020

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (1076)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This Ontario College Graduate Certificate has been designed for those who currently have a degree or diploma and wish to continue their education in the Hospitality and Tourism industry. The Hospitality and Tourism Management graduate program focuses on key areas of the hospitality and tourism industry including human resources, marketing, strategic and business planning and leadership.

Graduates of this program will gain administrative and leadership skills that prepare for management careers in a variety of exciting and worldwide hospitality and tourism operations.

## **PROGRAM OUTCOMES**

The graduate has reliably demonstrated the ability to:

- 1. Support business development by taking into account economic, political, social, global, and intercultural factors that influence the development of services, marketing strategies, customer retention, and sales programs.
- 2. Use qualitative and quantitative metrics to recommend services marketing and sales strategies in a global context.
- 3. Inform financial decision making that complies with jurisdictional practices.
- 4. Recommend strategies to maintain efficient, safe, secure, accessible and healthy hospitality and tourism operations that reduce risk and comply with jurisdictional legislation and legal obligation.
- 5. Support business development through the implementation of corporate sustainability, corporate social responsibility, and ethics principles.
- 6. Evaluate existing business and marketing programs to generate recommendations for local and global initiatives that support the strategic alignment of the organization's business plan.
- 7. Use project management principles, tools, and techniques to define timelines and project deliverables for all members of cross-functional, intercultural, and multi-disciplinary teams.
- 8. Support the development of a service delivery model and implementation plan to account for practices within global settings.
- 9. Optimize negotiation and communication frameworks to win support within various organizations across jurisdictions and cultural settings.
- 10. Prepare verbal, written and digital materials for the procurement of local and global services and commodities.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, Bachelor's Degree (or equivalent).

Applicants, whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.

## **CAREER PATHS**

Graduates will be prepared for management positions in:

- Convention or conference centre
- Destination marketing
- Hotel industry
- Restaurant industry
- Tourism operation
- Tourist attraction

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,025.80	\$1,117.00	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

For more information contact Program Coordinator Sarah Birkenhauer at 705.759.2554 ext 2588 or email sarah.birkenhauer@saultcollege.ca.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM510-2 Professional Communication HTM101-3 Principles of Hospitality and Tourism HTM102-3 Hospitality and Tourism Operations HTM103-3 e-Business and Technology Systems for the H & T Industry HTM104-3 Hospitality and Tourism Sales and Marketing HTM105-3 Ethics, Social Responsibility and Sustainable Tourism HTM106-3 Hospitality and Tourism Human Resource Management

## **SEMESTER 2**

CUL253-4 Food and Wine Pairing CUL254-3 Special Event Management HTM201-3 Operations Finance and Revenue Management in H & T HTM202-3 Hospitality Law and Risk Management HTM203-3 Hospitality and Tourism Strategic Management and Leadership HTM204-4 Hospitality and Tourism Capstone Project

## **Course Descriptions**

#### Semester 1

#### Professional Communication (CMM510) (2 credits)

This course helps students develop professional communication skills required for success in the Hospitality and Tourism industry. Assignments involve various modes of communication, including writing, with a focus on program-related materials and expectations. With opportunities to use computers and

other media, students create effective job search documents, develop interview skills, and identify career pathway possibilities. Emphasis is placed on integrating positive and inclusive language, listening to client needs, and developing error-free, effective communications.

## Principles of Hospitality and Tourism (HTM101) (3 credits)

This course provides an introductory examination of the hospitality and tourism industry, and will cover the scope and significance of the industries and its various sectors. The regional to global economic, social and political impacts and environments will be examined. As a component of the course, students will complete an in-depth project analyzing a sector in the industry.

## Hospitality and Tourism Operations (HTM102) (3 credits)

This course provides students with an introductory examination into the skills necessary to operate and manage a hospitality and tourism facility. Students will explore the organizational structures that govern businesses in these sectors, and will study the roles, responsibilities and functions of the departments and key positions. Operational procedures and standards, including guest services management, staffing, purchasing, budgeting, cost control, and risk management are examined.

## e-Business and Technology Systems for the H & T Industry (HTM103) (3 credits)

This course provides a comprehensive review of the technology systems that add value, generate revenue and become part of an organization's overall business strategy in the hospitality and tourism industry. Course material will cover digital and mobile ecosystems, e-marketing and e-commerce tools that when applied can result in increased sales, market share and greater quality and cost effectiveness.

## Hospitality and Tourism Sales and Marketing (HTM104) (3 credits)

This course provides an examination of the key principles associated with sales and marketing in the hospitality and tourism industry. The course material will cover consumer behaviour, strategic marketing, branding, product development and pricing, market segmentation, customer driven marketing strategies and sales techniques. Students will develop a marketing plan for a selected hospitality and tourism operation.

## Ethics, Social Responsibility and Sustainable Tourism (HTM105) (3 credits)

This course provides a comprehensive look at the unique challenges in the hospitality and tourism industry with the opportunities and challenges from globalization, environmental, social, ethical and economic perspectives. Course material will review tourism growth patterns, business evolution, and sustainable, responsible tourism development practices industry sectors.

## Hospitality and Tourism Human Resource Management (HTM106) (3 credits)

This course provides an examination of effective human resource management in the hospitality and tourism industry as it relates to the achievement of organizational goals and strategic objectives of the business. Particular attention will be placed on the importance of workforce planning, recruitment, training, retention, performance management and employee relation strategies as it relates to employment legislation, workplace diversity, and health and safety. Students will also be given the opportunity to develop their own customized job search correspondence and participate in mock interviews that help further develop communication and writing skills.

## Semester 2

## Food and Wine Pairing (CUL253) (4 credits)

Become a wine enthusiast and decipher the many complexities revealed in wine by developing the ability to pair food and wine in todays culinary world. Whether planning to entertain in the comfort of ones home, preparing for a business dinner meeting or developing food and wine menus for restaurants or special events, understanding how to pair food and wine is invaluable and a life skill. This course will explore the significance of food and drink by examining fundamental concepts of wine history, tradition and culture. Students will learn about terroir, wine terminology, production, storage, selection and how

#### wine is properly served.?

??????? In conjunction with wine education, culinary students will participate in a variety of hands-on labs that will explore the complexities of wine and its interactions with food. Students will prepare and sample a variety of diverse food and wines and prepare a variety of appetizers to match with selected wines and host a food and wine tasting event.

## Special Event Management (CUL254) (3 credits)

In this advanced level course, students will acquire knowledge and examine methods for achieving maximum customer satisfaction and profitability for special events. Students will experience first-hand, the knowledge and skills required to successfully propose, organize and execute the delivery of a special event. Students will gain practical experience through the conception, organization, marketing, costing, preparation and service of college events. Students will contribute to the creation of event menu items that reflect proper cost control practices and take into account customer requests, product availability, special dietary requests and restaurant and staff capabilities.

## Operations Finance and Revenue Management in H & T (HTM201) (3 credits)

This course provides an advanced examination of the responsibilities of the financial manager through a complete accounting cycle in a hospitality context. Course material will explore prudent financial management principles, practical fiscal accountability, and financial resource maximization while helping students develop a managerial perspective of how to record and summarize transactions into financial statements. Cost management, financial statement analysis and budgeting will be also covered.

## Hospitality Law and Risk Management (HTM202) (3 credits)

This course will describe the legal risk of operations in the hospitality and tourism industry. Course material will provide an overview of Canadian law and will introduce students to the concept of guest liability. Students will use specific reference to tort law, contract law, and the sale of alcohol, the Innkeepers' Act, the Occupier's Liability Act, and the responsibilities under the law related to successful management, guest safety and reduced liability.

## Hospitality and Tourism Strategic Management and Leadership (HTM203) (3 credits)

This course provides an in-depth examination the strategic role of leadership in hospitality and tourism organizations. Students will explore varying styles of leadership and the characteristics of a successful leader, and will be given the opportunity to explore their own style of leadership. Course material will cover effective leadership of individuals and teams, communication skills, conflict resolution, negotiation and problem solving skills in a theoretical and applied approach.

## Hospitality and Tourism Capstone Project (HTM204) (4 credits)

This course is the final project to demonstrate the core competencies required in the hospitality and tourism industry. In the exploration of a topic, students will research, delineate, apply and develop a strategic plan for a mock hospitality case. A final presentation and submission will include a feasibility study, market analysis, business plan and implementation strategy.

# Automated Manufacturing

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (4069)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Automated Manufacturing program at Sault College will help students gain knowledge, expertise and professional skills related to computer numerical controlled machined (CNC), additive manufacturing (3D printing) and robotics applications and automation used in various sectors of industry. These industries include precision machining shops, automotive, manufacturing, food packaging, medical, aerospace and many more. This program features new, state of the art CNC mill and lathe equipment, 3D printers and a new world class laboratory equipped with the latest robotics equipment installed in a simulated manufacturing environment.

## **PROGRAM OUTCOMES**

1. Solve automated manufacturing problems found in a typical industrial environment by applying engineering principles and decision-making strategies.

2. Analyze and synthesize technical data to develop graphics and related technical documents conforming to engineering standards.

3. Select and manage appropriate hardware and software for the creation of engineering designs.

4. Identify and utilize manufacturing processes, rapid prototyping methods, and automation technologies to optimize product development.

5. Incorporate sustainable, economic, safe and ethical approaches in the design and implementation of projects.

6. Configure, control, monitor, and evaluate automated manufacturing components and systems to improve automated manufacturing systems and maintain quality control measures in response to industry needs and requirements.

7. Exercise professionalism, leadership, and effective communication in an industrial work setting to increase overall productivity and support a positive work environment.

8. Ensure automation equipment is in compliance with established operating procedures, and occupational health and safety regulations.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, Degree, or equivalent.

It is preferred that students have an educational background in engineering, or an acceptable combination of related work experience and post-secondary education (as determined by the College).

Applicants whose first language is not English must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.

## **CAREER PATHS**

Areas include but are not limited to public and private sector groups with a focus on tooling and prototype, precision machining, automotive, and aerospace manufacturing; food and beverage, and pharmaceutical industries; original equipment manufacturers, system integrators, and automation distribution and sales.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
N/A	N/A	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

AMF101-3 Integrated Manufacturing Systems AMF102-3 Solid Modelling I AMF103-2 Additive Manufacturing I AMF104-5 Computer Numerical Control Machining I AMF105-2 Project Research, Ethics, and Report Writing AMF106-5 Automated Sensing and Control

## **SEMESTER 2**

AMF201-6 Robotics in Manufacturing AMF202-3 Solid Modelling II AMF203-3 Additive Manufacturing II AMF204-5 Computer Numerical Control Machining II AMF205-3 Project Course

## **Course Descriptions**

#### Semester 1

#### Integrated Manufacturing Systems (AMF101) (3 credits)

In this course, students are introduced to Integrated Manufacturing Processes involving a variety of materials used in modern manufacturing industries. The topics cover an overview of common production machines, automated systems, robotics, computer controlled machines, modern material handling processes, inspection systems and process control. The course will include topics involving economics of integrated manufacturing as well as the societal and environmental issues related to manufacturing.

#### Solid Modelling I (AMF102) (3 credits)

Solid Modelling I focuses on the transition from 2D to 3D design and 3D software used in manufacturing product applications. The student will be introduced to mechanical 3d design software used to build parametric models of parts and assemblies, and how to make drawings of those parts and assemblies.

## Additive Manufacturing I (AMF103) (2 credits)

In this course, students will be introduced to the physical properties and manufacturing characteristics of

composites, polymers, various metallic alloys, binders and substrates used in Additive Manufacturing (AM). This course provides a fundamental overview of AM history and equipment, 3D printing, rapid prototyping, computer model simulation and programming, secondary processing and the impact of AM in society.

## Computer Numerical Control Machining I (AMF104) (5 credits)

This course is designed to introduce currently enrolled and recently graduated students to theoretical and practical applications of Computer Numerical Controlled Machining in a Manufacturing environment that coupled with other courses including Automation Sensing and Control, Automated Manufacturing incorporating Robotics and additive Manufacturing opens up opportunities in Mechatronics type industries. This course will expose students to all aspects of Program interpretation, Program creation, Safe setup and operation of a 2 axis Tormach lathe. Students will work on the Lathes and have access to the virtual path pilot simulation software supplied by Tormach.

## Project Research, Ethics, and Report Writing (AMF105) (2 credits)

The students in this course will gain the understanding of project management and research which includes: project planning, scheduling and reporting. The students will also gain the understanding of ethics and technical report writing.

## Automated Sensing and Control (AMF106) (5 credits)

Automated manufacturing control systems interact with the real world using hydraulic and pneumatic actuators and various discrete, analog and specialty sensors. This course focuses on automated hydraulic and pneumatic controls as well as the operation and correct application of automation sensors.

## Semester 2

## Robotics in Manufacturing (AMF201) (6 credits)

The students in this course will gain the understanding of robotics as it applies to the production and assembly processes. The basic principles of robotics will be introduced using ABB RobotStudio for simulation and real world using teach pendant programming. Students will also be exposed to specific process commands and various programming languages.

## Solid Modelling II (AMF202) (3 credits)

Solid Modelling II course builds on the fundamentals presented in Solid Modeling I. This course will provide students with an understanding of the parametric design philosophy through a hands-on, practice-intensive curriculum.

## Additive Manufacturing II (AMF203) (3 credits)

In this course, students will manufacture parts from 3 dimensional computer models created in Autodesk Inventor or SolidWorks. The students will develop the manufacturing plan and create the code required to program a 3D printer. Students will focus on the various applications, the size and design constraints, and develop a good understanding of the advantages and disadvantages of this technology.

## Computer Numerical Control Machining II (AMF204) (5 credits)

This course is designed to introduce currently enrolled and recently graduated students to theoretical and practical applications of Computer Numerical Controlled Machining in a manufacturing environment that coupled with other courses including Automation Sensing and Control, Automated Manufacturing incorporating Robotics and Aditive Manufacturing opens up opportunities in Mechatronics type industries. This course will expose students to all aspects of Program interpretation, Program creation, Safe setup and operation of a 3 axis Tormach PCNC 440 Milling Machine. Students will also carry over the training from semester 1 on CNC Lathes and will be able to proficiently incorporate the lathe and milling training to create functional components. Students will work on the Milling Machines and Lathes and have access to the virtual path pilot simulation software supplied by Tormach that is applicable to both lathes and milling machines.

## Project Course (AMF205) (3 credits)

The students in this course will research a relevant automated manufacturing application used in industry and perform a similar operation using the CNCs, 3D printers and industrial robots that they have become familiar with over the course of the program.

# **Civil Engineering Technician**

Section B.84 6/2/2020

Ontario College Diploma (2 Years- 4 Semesters ) (4080) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

If you look at the world around you, chances are there are few things that have been built without having been touched by the world of civil engineering. The Civil Engineering Technician program is designed to prepare you with the basic skills and knowledge to assist in the design and construction process. Graduates work in a variety of careers including computer-aided drafting and design (CAD), surveying, construction layout and inspection, field and laboratory testing, supervision and scheduling of projects, estimating, sales and marketing, as well as design and construction of municipal installations, highways, pipelines, and hydro-electric developments.

Design systems, facilities, infrastructure and processes are studied with an emphasis on projects and computer applications. Traditional disciplines are also studied including structures, transportation, geotechnical, municipal, and environmental engineering.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

## **PROGRAM OUTCOMES**

## A graduate of the Civil Engineering Technician Program at Sault College will reliably demonstrate the ability to:

1. develop and use strategies to enhance professional growth and ongoing learning in the civil engineering field.

2. comply with workplace health and safety practices and procedures in accordance with current legislation and regulations.

3. complete duties and assist in monitoring that work is performed in compliance with contractual obligations, applicable laws, standards, bylaws, codes and ethical practices in the civil engineering field.

4. carry out sustainable practices in accordance with contract documents, industry standards and environmental legislative requirements.

5. collaborate with the project team and communicate effectively with *project stakeholders* to support *civil engineering projects*.

6. collect, process and interpret technical data to produce written and graphical project-related documents.

7. use industry-specific electronic and digital technologies to support civil engineering projects.

8. participate in the design and modeling phase of *civil engineering projects* by applying engineering concepts, *basic technical mathematics* and principles of science to the review and production of project

plans.

9. assist in the scheduling, cost estimation and monitoring of the progression of *civil engineering projects* by applying principles of construction project management.

10. perform *quality control* testing and the monitoring of equipment, materials and methods involved in the implementation and completion of *civil engineering projects*.

11. apply teamwork, leadership and interpersonal skills when working individually or within multidisciplinary teams to complete *civil engineering projects*.

#### Reference

Ministry of Training, Colleges and Universities, Civil Engineering Program Standards (MTCU 51003), July 2016.

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## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, Grade 12 Mathematics for College Technology (C) MCT4C or Grade 12 Foundations for College Math (C) MAP4C, or mature student status.

## **CAREER PATHS**

As a graduate from this program, you will be able to seek careers with consulting engineering companies, general contractors, building product manufacturers, municipal governments, highway departments, and federal public works departments.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,975.80	\$1,362.00	\$15,463.10	\$1,822.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

This is a co-operative education program. Students are required to complete at least one co-op work placement (CWA100) in order to graduate.

For more information contact Program Coordinator Marc Pilon, P.Eng at:

Marc.Pilon@saultcollege.ca 705-759-2554 Ext: 2585

For more information contact Program Coordinator Marc Pilon, P.Eng at:

Marc.Pilon@saultcollege.ca 705-759-2554 Ext: 2585

## **PROGRAM OF STUDY**

## **SEMESTER 1**

CCT100-4 Construction Safety/Tools CCT103-4 Blueprints, Specifications & Layout CMM115-3 Communications I MTH145-4 Mathematics SUR101-4 Surveying

## **SEMESTER 2**

ARC101-5 Building and Construction Estimating CAD100-4 Introduction to Computers and AutoCAD CCT120-4 Concrete and Formwork I CON200-4 Construction Materials I CWA100-3 Co-op Placement I Note: CWA100-3 is mandatory and takes place in the summer. MCH100-4 Applied Mechanics GEN100-3 Global Citizenship

## **SEMESTER 3**

CAD222-3 Applied CAD II CIV215-3 Project Management and Law CMM210-3 Technical Communication MCH212-4 Mechanics of Materials MTH146-4 Mathematics SUR201-4 Surveying POL110-3 Introduction to Canadian Government

## **SEMESTER 4**

ARC217-4 Soil Mechanics CAD266-3 AutoCAD Civil 3D Applications CIV205-4 Applied Municipal Services CIV216-4 Highway Engineering CIV225-5 Structures

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (details) prior to the semester in which the

student-selected general education course is to be taken.

## **Course Descriptions**

#### Semester 1

## Construction Safety/Tools (CCT100) (4 credits)

This course focuses on safety practices and procedures in the construction industry. Students will learn about occupational and health safety standards, work site hazards, personal protective equipment and maintenance requirements, and work site communication skills.

Hands on applications focus on safe operation of hand tools, power tools, powder actuacted tools and cutting torch.

## Blueprints, Specifications & Layout (CCT103) (4 credits)

This course focuses on interpreting blueprints, drawings and layouts using architectural and measurement conventions to industry standards of practice. Students will learn to interpret sketches and drawings and learn to use scales, tapes and measurement conventions. They will also learn basic principles of construction layout. Throughout the course, the student will be familiarized with relevant provisions of the Ontario Building Code.

## Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Mathematics (MTH145) (4 credits)

This first level mathematics course for engineering technology programs begins with a review of fundamental concepts including arithmetic operations and concepts in measurement. This is followed by several algebra topics including linear equations, factoring, fractions and quadratic equations. A treatment of trigonometry of right triangles, the trigonometric functions of any angle and of oblique triangles is also included.

The goals of this course are, first, to show that mathematics does play a most important role in the development and understanding of the various fields of technology and, secondly, to ensure that students acquire the mathematical and critical thinking skills necessary to analyze and solve engineering technology problems.

## Surveying (SUR101) (4 credits)

This course introduces the student to basic surveying principles. The topics deal with the theory, application, and care of traditional instruments such as the level, theodelite and chain. Emphasis is placed on contributing effectively as a team member of a survey crew.

## Semester 2

## Building and Construction Estimating (ARC101) (5 credits)

This course covers the theories and principles of estimating and quantity survey techniques applied to light construction projects. The subject includes mathematics of estimating, site work, concrete and form work, carpentry, masonry, and moisture protection and finishes. The student will develop unit construction costs to supply and install building elements.

## Introduction to Computers and AutoCAD (CAD100) (4 credits)

This course briefly introduces students to computer concepts and PC software applications. Practical skills in the use of Windows, file management and spreadsheets will be developed. With this basic foundation, the student will explore the fundamentals of computer assisted drafting using AutoCAD. Practical exercises will help the student develop a basic knowledge of AutoCAD. The student will understand the fundamental concepts of computer applications related to architectural and engineering drawing.

## Concrete and Formwork I (CCT120) (4 credits)

This course focuses on the methods and procedures used in the placement of concrete and form setting. Students will learn about equipment and tools used in concrete placement, and will learn to install concrete and grout material as well as reinforcement components. Students will also learn to interpret blueprints for form setting activities and the use of form setting tools.

## Construction Materials I (CON200) (4 credits)

The student is introduced to various construction materials such as aggregates, Portland cement concrete and asphalt concrete. Understanding of the physical and engineering properties of these materials is accomplished by way of lectures, laboratory, testing, field trips and class presentations.

## Co-op Placement I (CWA100) (3 credits)

Students will spend their first work term working in Civil related activities at a level compatible with their skills. The student will keep an activity log and prepare a report based on their job experience. The employer will do an evaluation of the co-op employee.

## Applied Mechanics (MCH100) (4 credits)

The objective of this course is to introduce the student to a number of fundamental concepts of statics which should prove useful to the civil, architectural, and construction students. Every effort will be made not to dwell on the theory of these concepts but to instead stress practical applications through the extensive use of problem solving.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 3

## Applied CAD II (CAD222) (3 credits)

This course is intended to expand on the basic skills developed from other introductory formal CAD courses. Students should have prerequisite CAD120 or equal industrial experience. The student will learn how to use advanced AutoCAD features such as customization of menus and tablets, macros, integrate basic LISP programs, digitizing, understand the principle of 3-D modeling wire frames, surfaces and solids.

## Project Management and Law (CIV215) (3 credits)

To familiarize the student with construction management practices, contractual arrangements, types of contracts, contract documents, bonds and insurance, bidding procedure, planning and scheduling, contract administration, and arbitration.

## Technical Communication (CMM210) (3 credits)

This course provides training in technical communication. Emphasis is given to memos, letters, forms, and reports. Oral reporting and its importance on the job are also included. The effective use of computers to research and generate technical documents is an essential component of this course. The theory of writing is taught through the writing process.

## Mechanics of Materials (MCH212) (4 credits)

This subject deals with direct stress, thin wall cylinders, stress-strain, thermal stress, riveted and bolted connections, welded connections, centroids and moment of inertia of structural shapes, shear and bending moments, design of beams, flexure formula, and factor of safety.

## Mathematics (MTH146) (4 credits)

This course is a continuation of MTH145 for engineering and technology students. Topics of study include geometry, exponents and radicals, exponential and logarithmic functions, variation, plane analytic geometry, statistics, and graphs of trigonometric functions. This course is suitable for students studying at the technician level.

## Surveying (SUR201) (4 credits)

This course is a continuation of SUR235. Students will apply the knowledge gained in the operation of surveying instruments in practical construction layout projects. In addition, students are introduced to total station surveying and associated computer applications such as COCGO and map creation, terrain modeling and project data management.

## Introduction to Canadian Government (POL110) (3 credits)

This course is designed to provide students with an overview of Canadian government. The key structures of government at all levels will be reviewed; however, the primary focus will be on the federal and provincial levels. Students will become cognizant of the impact of government on their lives and how their participation in the system can affect change.

## Semester 4

## Soil Mechanics (ARC217) (4 credits)

The student will reinforce his/her understanding of soil formation, identification and classification. In addition, the student will be introduced to the engineering properties of soil and movement of water through soil. Sub-grade pavement materials will also be covered.

## AutoCAD Civil 3D Applications (CAD266) (3 credits)

This course will further develop student's skills in AutoCAD, specifically the understanding of applications and proficiency in Civil 3D. AutoCAD Civil 3D is the backbone of Civil Engineering Industry in a variety of sectors (Land development, Municipal Infrastructure, Transportation) and extends the knowledge of 2D AutoCAD, as well as surveying applications.

This course will develop skills in Surfaces, Alignment, Corridors, Plan and Profiles, Cuts and Fills, as well as general geometric alignments of roadways and infrastructure. At the completion of this Course, students will be able to develop base drawings in 3D surveyed data, add and modify underground elements (i.e. sewers, water main, maintenance structures), develop alignments of existing and proposed construction, and determine material quantities.

## Applied Municipal Services (CIV205) (4 credits)

Students will examine: water supply, water treatment plants, sewage disposal, garbage disposal, sewer design, government approval applications, subdivision design. Field trips to various municipal services installation works are included.

## Highway Engineering (CIV216) (4 credits)

This course will introduce the student to fundamental concepts in the field of transportation engineering. The student will develop a working knowledge of road classification, level of service, traffic study, highway geometrics and intersection design. Computer and survey applications will be discussed when appropriate.

## Structures (CIV225) (5 credits)

This course provides the student with a general understanding of structures. The topics deal with general types of structures, loads on structures, analysis and design of structural elements.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

## Electrical Engineering Technician -Process Automation

Section B.85 6/2/2020

Ontario College Diploma (2 Years - 4 Semesters ) (4026)705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Electrical Engineering Technician - Process Automation program provides you with the basic knowledge of electricity and electronics. As a student, you will learn to apply related subjects such as computer technology, industrial electronics, instrumentation, electrical machines, robotics, power electronics, and automated control systems. When you graduate, you will be geared towards a career in the industrial environment and will be able to install, test, modify, troubleshoot, and repair electrical systems. You will also be able to approach industrial electrical and electronic systems from the viewpoint of analysis, technical evaluation, design, and development.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career funding</u> for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C, Grade 12 Foundations for College Math (C) MAP4C, or mature student status. Completion of the two year Electrical Engineering Technician - Process Automation program and technology-level mathematics are required for entrance to the Technology program.

## ACADEMIC RECOMMENDATIONS

Grade 12 Mathematics for College Technology (C) MCT4C.

## **CAREER PATHS**

Graduates of the Electrical Engineering Technician Process Automation program may be employed by a public utilities commission, an industrial user, a manufacturer of electrical equipment, an electrical installer, or an electrical engineering consulting firm. Other potential areas of employment include the steel and papermaking industries and electrical power generation.

As an Electrical Engineering Technician, graduates may also be hired as an instrument repair technician, electrical maintenance technician, process control technician, or electrical repairer.

Technician and technology graduates who have had two years of acceptable work experience are eligible for certification by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT) subject to fees and other requirements as established by OACETT. For more information please visit the OACETT website: <u>https://www.oacett.org/</u>.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

For more information contact Bob Allen at 705.759.2554 ext 2522 or email Bob.Allen@saultcollege.ca.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I ELN100-5 Electronic Fundamentals I ELR100-5 Electrical Fundamentals DC ELR114-3 Measurement and Shop Practice MTH142-5 Mathematics GEN100-3 Global Citizenship

## **SEMESTER 2**

ELN109-5 Electronic Devices and Circuits ELN210-3 Computer Aided Design ELR109-5 A.C. Circuit Analysis & Machines MTH143-5 Mathematics

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

## **SEMESTER 3**

ELN115-6 Digital Integrated Electronics ELN213-4 Electronic Devices and Circuits II ELN229-4 Instrumentation/Process Control ELR215-3 Electrical Power Systems ELR216-2 Introduction to Robotics ELR232-7 Electrical Machines

## **SEMESTER 4**

ELR223-6 Robotic and PLC Control Systems

ELR236-7 Power Electronics RAA205-4 Industrial Automation Networking I ELR214-4 Organizational Effectiveness **Note:** Students must also take MTH551-4 Calculus I in Semester 4 should they elect to enter Program 4029 - Electrical Engineering Technology - Process Automation.

## **Course Descriptions**

## Semester 1

Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Electronic Fundamentals I (ELN100) (5 credits)

This is an introduction to the physical principles of semi-conductors and diodes with practical circuit applications. The study of LINEAR DC power supplies and transistor circuit analysis with related laboratory projects is also introduced.

## Electrical Fundamentals DC (ELR100) (5 credits)

This is an introduction to electrical quantities and units; Ohm's and Kirchoff's Laws; simple DC series, parallel, series-parallel, and voltage divider circuits; simple DC network analysis; magnetism and electromagnetism; inductance and capacitance; DC series RL circuit analysis.

## Measurement and Shop Practice (ELR114) (3 credits)

This course provides an understanding of the operating principles, characteristics, and application of electrical/electronic measuring instruments. Component testing and identification, soldering, wire-wrapping and hand tool exercises will be practiced in a lab setting.

## Mathematics (MTH142) (5 credits)

This first level mathematics course for engineering technology programs begins with a review of fundamental concepts, arithmetic operations, and units of measurement. This is followed by an in-depth study of basic algebra, trigonometric and other functions, and quadratic equations.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 2

## Electronic Devices and Circuits (ELN109) (5 credits)

This course is an in-depth analysis of amplifiers, using D.C. and A.C. equivalent circuits, employing BJT's, JFET's, MOSFET's, and linear IC's (OPAMPS). The lab work will include the design, analysis, testing and troubleshooting of amplifiers.

## Computer Aided Design (ELN210) (3 credits)

This course will teach the student the use of computer aided design tools (AUTOCAD) within the electrical industry. Software will be used to create and modify electrical/electronic schematics, wiring and layout diagrams.

## A.C. Circuit Analysis & Machines (ELR109) (5 credits)

This course is an analytical study of series, parallel and series-parallel A.C. impedance networks, network theorems and polyphase circuits. Concurrently an introduction to A.C. and D.C. motors and generators together with their control methods is studied using complex math.

## Mathematics (MTH143) (5 credits)

This course is a continuation of MTH142 (from Semester I) for engineering technology students. Topics of study include exponents and radicals, plane analytic geometry, solid mensuration, and functions including trigonometric, exponential and logarithmic functions. This course concludes with an introduction to statistics.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

## Semester 3

## Digital Integrated Electronics (ELN115) (6 credits)

This course is the study of digital logic circuits and pulse circuits. The student will study pulse fundamentals, basic digital gates, flip flops counters and registers, A/D and D/A conversion. Practical exercises include circuit analysis, testing, troubleshooting and applications.

## Electronic Devices and Circuits II (ELN213) (4 credits)

This course is a detailed study of control devices and circuits together with their industrial applications. Topics include relays, timing circuits, operational amplifiers, optoelectronics, trigger devices (BJT, UJT, 555 timer), THYRISTOR control devices (SCR, TRIACS). Related practical exercises will consist of circuit design, analysis, testing and trouble-shooting.

## Instrumentation/Process Control (ELN229) (4 credits)

This course introduces the student to the principles of Instrumentation and Process Control. The measurement and control of process variables such as temperature, pressure, level and flow will be studied in detail and applied in the practical component of the course.

## Electrical Power Systems (ELR215) (3 credits)

This course is a study of the production and delivery of electrical power from the generating station to the consumer. Transmission and distribution equipment, system configurations, protection and control and electrical load fundamentals will be discussed and analyzed.

## Introduction to Robotics (ELR216) (2 credits)

This is an introductory course in industrial robotics. Topics covered will include types of robots and their applications, cell design, safety and utilization of simulation/programming software. Students will develop and demonstrate basic programs for control of 6 axis robots.

## Electrical Machines (ELR232) (7 credits)

This course is an analytical study of the characteristics, performance and control of D.C. generators and motors, single and polyphase induction motors, polyphase synchronous machines and transformers, supported by an integrated laboratory program.

## Semester 4

## Robotic and PLC Control Systems (ELR223) (6 credits)

This course will introduce the student with classical control fundamentals and reinforce them through robotic and programmable logic controller applications.

## Power Electronics (ELR236) (7 credits)

This course is an introductory analytical study of A.C. and D.C. motor control utilizing solid-state techniques. The topics include D.C. motor speed control utilizing phase-controlled and chopper converters; and polyphase A.C. motor speed control utilizing six-step and pulse-width modulated inverters and phase-controlled cycloconverters. This course is supported by a well equipped laboratory program.

## Industrial Automation Networking I (RAA205) (4 credits)

The student will study the technology and protocols used in industrial networks for process automation.? The TCP/IP 4 layer model will form the basis of the course with a comparison to the OSI 7 layer model.? The theory will be strengthened with hands-on labs in cable making, protocol analysis (RS232, RS485, TCP/IP) as well as building simple client/server networks.? Industrial networks topics such as Ethernet/IP and CAN BUS will also be studied.

## Organizational Effectiveness (ELR214) (4 credits)

Knowledge of the patterns and precedents of the past provide the means for a person to gain awareness of his/her place in contemporary culture. Every organization, as a culture, requires critical elements to be effective. Appreciating the roles and contributions of those elements inform one's understanding of the organizational culture. Some key elements include Quality Assurance, the organization's relevance to consumer well-being and the operation of inter-disciplinary teams. This course will provide insight into historical and current organizational cultures and the need for motivation in them.

## Electrical Engineering Technician -Process Automation and Trades

Section B.86 6/2/2020

Ontario College Diploma (2 Years - 4 Semesters ) (4127)705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

Sault College's Electrical Engineering Technician - Process Automation and Trades program is designed to provide you with the knowledge and skills required to pursue a career as an Electrical Engineering Technician and/or as an Industrial or Construction Electrician. Classroom instruction (semesters one through four) at Sault College will provide you with the basics of electricity and electronics as well as related subjects such as computer technology, industrial electronics, instrumentation, electrical machines, power electronics, and automated control systems. These skills will prepare you for a career in industrial environments with the electrical trades. Graduates will have a wide variety of skills including those required to install, test, modify, troubleshoot, and repair electrical systems.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C, Grade 12 Foundations for College Math (C) MAP4C, or mature student status.

## ACADEMIC RECOMMENDATIONS

Grade 12 Mathematics for College Technology (C) MCT4C.

## **CAREER PATHS**

The work-ready graduates of the Electrical Engineering Technician - Process Automation and Trades program have numerous opportunities and will be attractive to prospective employers given their Electrical Engineering Technician program diploma. As an Electrical Engineering Technician, graduates may also be hired as an instrument repair technician, electrical maintenance technician, process control technician, or electrical repairer.

Graduates of this program may also pursue further education or apprenticeships in the Construction or Industrial Electrician trades. Students wishing to pursue an apprenticeship should contact the local office of the Ministry of Training, Colleges & Universities, Apprenticeship Branch - 705.945.6815 in Sault Ste. Marie.

Technician and technology graduates who have had two years of acceptable work experience are eligible for certification by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT) subject to fees and other requirements as established by OACETT. For more information please visit the OACETT website: <u>https://www.oacett.org/</u>.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

For more information contact Bob Allen at 705.759.2554 ext 2522 or email Bob.Allen@saultcollege.ca.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I ELN100-5 Electronic Fundamentals I ELR100-5 Electrical Fundamentals DC ELR114-3 Measurement and Shop Practice MTH142-5 Mathematics GEN100-3 Global Citizenship

## **SEMESTER 2**

ELN109-5 Electronic Devices and Circuits ELN210-3 Computer Aided Design ELR109-5 A.C. Circuit Analysis & Machines ELR113-2 Installation Methods I MTH143-5 Mathematics

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

## **SEMESTER 3**

ELN115-6 Digital Integrated Electronics ELN213-4 Electronic Devices and Circuits II ELN229-4 Instrumentation/Process Control ELR215-3 Electrical Power Systems ELR216-2 Introduction to Robotics ELR232-7 Electrical Machines

## **SEMESTER 4**

ELR223-6 Robotic and PLC Control Systems ELR233-5 Installation Methods III ELR236-7 Power Electronics RAA205-4 Industrial Automation Networking I

#### ELR214-4 Organizational Effectiveness

**Note:** Students must also take MTH551-4 Calculus in Semester 4 should they elect to enter Program 4029 - Electrical Engineering Technology - Process Automation.

## **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Electronic Fundamentals I (ELN100) (5 credits)

This is an introduction to the physical principles of semi-conductors and diodes with practical circuit applications. The study of LINEAR DC power supplies and transistor circuit analysis with related laboratory projects is also introduced.

## Electrical Fundamentals DC (ELR100) (5 credits)

This is an introduction to electrical quantities and units; Ohm's and Kirchoff's Laws; simple DC series, parallel, series-parallel, and voltage divider circuits; simple DC network analysis; magnetism and electromagnetism; inductance and capacitance; DC series RL circuit analysis.

## Measurement and Shop Practice (ELR114) (3 credits)

This course provides an understanding of the operating principles, characteristics, and application of electrical/electronic measuring instruments. Component testing and identification, soldering, wire-wrapping and hand tool exercises will be practiced in a lab setting.

## Mathematics (MTH142) (5 credits)

This first level mathematics course for engineering technology programs begins with a review of fundamental concepts, arithmetic operations, and units of measurement. This is followed by an in-depth study of basic algebra, trigonometric and other functions, and quadratic equations.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 2

## Electronic Devices and Circuits (ELN109) (5 credits)

This course is an in-depth analysis of amplifiers, using D.C. and A.C. equivalent circuits, employing BJT's, JFET's, MOSFET's, and linear IC's (OPAMPS). The lab work will include the design, analysis, testing and troubleshooting of amplifiers.

## Computer Aided Design (ELN210) (3 credits)

This course will teach the student the use of computer aided design tools (AUTOCAD) within the electrical industry. Software will be used to create and modify electrical/electronic schematics, wiring and layout

#### diagrams.

#### A.C. Circuit Analysis & Machines (ELR109) (5 credits)

This course is an analytical study of series, parallel and series-parallel A.C. impedance networks, network theorems and polyphase circuits. Concurrently an introduction to A.C. and D.C. motors and generators together with their control methods is studied using complex math.

#### Installation Methods I (ELR113) (2 credits)

This course introduces the student to residential wiring practices and the Canadian Electrical Code.

#### Mathematics (MTH143) (5 credits)

This course is a continuation of MTH142 (from Semester I) for engineering technology students. Topics of study include exponents and radicals, plane analytic geometry, solid mensuration, and functions including trigonometric, exponential and logarithmic functions. This course concludes with an introduction to statistics.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 3

#### Digital Integrated Electronics (ELN115) (6 credits)

This course is the study of digital logic circuits and pulse circuits. The student will study pulse fundamentals, basic digital gates, flip flops counters and registers, A/D and D/A conversion. Practical exercises include circuit analysis, testing, troubleshooting and applications.

#### Electronic Devices and Circuits II (ELN213) (4 credits)

This course is a detailed study of control devices and circuits together with their industrial applications. Topics include relays, timing circuits, operational amplifiers, optoelectronics, trigger devices (BJT, UJT, 555 timer), THYRISTOR control devices (SCR, TRIACS). Related practical exercises will consist of circuit design, analysis, testing and trouble-shooting.

## Instrumentation/Process Control (ELN229) (4 credits)

This course introduces the student to the principles of Instrumentation and Process Control. The measurement and control of process variables such as temperature, pressure, level and flow will be studied in detail and applied in the practical component of the course.

## Electrical Power Systems (ELR215) (3 credits)

This course is a study of the production and delivery of electrical power from the generating station to the consumer. Transmission and distribution equipment, system configurations, protection and control and electrical load fundamentals will be discussed and analyzed.

#### Introduction to Robotics (ELR216) (2 credits)

This is an introductory course in industrial robotics. Topics covered will include types of robots and their applications, cell design, safety and utilization of simulation/programming software. Students will develop and demonstrate basic programs for control of 6 axis robots.

## Electrical Machines (ELR232) (7 credits)

This course is an analytical study of the characteristics, performance and control of D.C. generators and motors, single and polyphase induction motors, polyphase synchronous machines and transformers, supported by an integrated laboratory program.

#### Semester 4

## Robotic and PLC Control Systems (ELR223) (6 credits)

This course will introduce the student with classical control fundamentals and reinforce them through robotic and programmable logic controller applications.

## Installation Methods III (ELR233) (5 credits)

This course is a continuation of installation Methods I and II. Residential wiring methods are completed and commercial wiring methods are introduced.

## Power Electronics (ELR236) (7 credits)

This course is an introductory analytical study of A.C. and D.C. motor control utilizing solid-state techniques. The topics include D.C. motor speed control utilizing phase-controlled and chopper converters; and polyphase A.C. motor speed control utilizing six-step and pulse-width modulated inverters and phase-controlled cycloconverters. This course is supported by a well equipped laboratory program.

## Industrial Automation Networking I (RAA205) (4 credits)

The student will study the technology and protocols used in industrial networks for process automation.? The TCP/IP 4 layer model will form the basis of the course with a comparison to the OSI 7 layer model.? The theory will be strengthened with hands-on labs in cable making, protocol analysis (RS232, RS485, TCP/IP) as well as building simple client/server networks.? Industrial networks topics such as Ethernet/IP and CAN BUS will also be studied.

## Organizational Effectiveness (ELR214) (4 credits)

Knowledge of the patterns and precedents of the past provide the means for a person to gain awareness of his/her place in contemporary culture. Every organization, as a culture, requires critical elements to be effective. Appreciating the roles and contributions of those elements inform one's understanding of the organizational culture. Some key elements include Quality Assurance, the organization's relevance to consumer well-being and the operation of inter-disciplinary teams. This course will provide insight into historical and current organizational cultures and the need for motivation in them.

## Electrical Engineering Technology -Process Automation

Section B.87 6/2/2020

**Ontario College Advanced Diploma (3 Years - 6 Semesters ) (4029)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The three-year Electrical Engineering Technology - Process Automation program provides you with the basic knowledge of electricity and electronics. As a student, you will learn to apply related subjects such as computer technology, industrial electronics, instrumentation, electrical machines, robotics, power electronics, and automated control systems. As a graduate, you will be able to approach industrial electrical and electronic systems from the viewpoint of analysis, technical evaluation, design, and development. This program concentrates on the in-depth study of electrical and electronic principles as they apply to the automated systems using programmable logic controllers. `Thru-way` programs offer diplomas at the completion of Year 2 and have additional year of study when there is sufficient enrolment.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Graduate of either the 2-year Electrical Engineering Technician - Process Automation program or Electrical Engineering Technician - Process Automation and Trades program and successful completion of MTH551 (Calculus) or equivalent.

## **CAREER PATHS**

Graduates of the Electrical Engineering Technologist - Process Automation Program may be employed by a public utilities commission, an industrial user, a manufacturer of electrical equipment, an electrical installer, or an electrical engineering consulting firm. Other potential areas of employment include the steel and papermaking industries and electrical power generation. As an Electrical Engineering Technologist, graduates may also be hired as an instrument repair technician, process control technician, and industrial electrician apprentice. The Electrical Engineering Technologist - Process Automation will be qualified to seek employment in a number of different areas upon completion of the program. Employment prospects exist in high technology areas including process and automated control systems in the steel and papermaking industries, nuclear power generation, and electric urban transit systems. Some potential employers include original equipment manufacturers, major primary and secondary industries such as the automotive parts manufacturing sectors, consulting engineering companies, and crown corporations. Graduates of the three-year Electrical Engineering Technology - Process Automation program may continue their education at Lakehead University for an additional 2 years to obtain an Electrical Engineering degree.

Technician and technology graduates who have had two years of acceptable work experience are eligible for certification by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT) subject to fees and other requirements as established by OACETT. For more information please visit the OACETT website: <u>https://www.oacett.org/</u>.

## **OTHER INFORMATION**

Graduates of the Electrical Engineering Technology - Process Automation diploma program are now able to transfer to Lake Superior State University into the Bachelor of Science in Electrical Engineering Technology degree program. For more information about this exciting opportunity please visit the <u>University Pathways</u> page on the Sault College website.

For more information contact Bob Allen at 705.759.2554 ext 2522 or email Bob.Allen@saultcollege.ca.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I ELN100-5 Electronic Fundamentals I ELR100-5 Electrical Fundamentals DC ELR114-3 Measurement and Shop Practice MTH142-5 Mathematics GEN100-3 Global Citizenship

## **SEMESTER 2**

ELN109-5 Electronic Devices and Circuits ELN210-3 Computer Aided Design ELR109-5 A.C. Circuit Analysis & Machines MTH143-5 Mathematics

#### Select one of the following:

GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

## **SEMESTER 3**

ELN115-6 Digital Integrated Electronics ELN213-4 Electronic Devices and Circuits II ELN229-4 Instrumentation/Process Control ELR215-3 Electrical Power Systems ELR216-2 Introduction to Robotics ELR232-7 Electrical Machines

## **SEMESTER 4**

ELR223-6 Robotic and PLC Control Systems ELR236-7 Power Electronics MTH551-4 Calculus I for Technology RAA205-4 Industrial Automation Networking I ELR214-4 Organizational Effectiveness

## **SEMESTER 5**

CSD105-3 Python ELN335-3 Embedded Microcontrollers I ELR320-7 Automated Electrical Systems ELR326-4 Industrial Automation Networking II MTH577-4 Calculus II for Technology

## **SEMESTER 6**

ELN340-4 Embedded Microcontrollers II

ELR309-7 Numerical and Network Analysis ELR311-3 Research Project ELR315-6 Automatic Control Systems ELR330-6 Electrical Power System Analysis and Design

## **Course Descriptions**

## Semester 1

## Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Electronic Fundamentals I (ELN100) (5 credits)

This is an introduction to the physical principles of semi-conductors and diodes with practical circuit applications. The study of LINEAR DC power supplies and transistor circuit analysis with related laboratory projects is also introduced.

## Electrical Fundamentals DC (ELR100) (5 credits)

This is an introduction to electrical quantities and units; Ohm's and Kirchoff's Laws; simple DC series, parallel, series-parallel, and voltage divider circuits; simple DC network analysis; magnetism and electromagnetism; inductance and capacitance; DC series RL circuit analysis.

## Measurement and Shop Practice (ELR114) (3 credits)

This course provides an understanding of the operating principles, characteristics, and application of electrical/electronic measuring instruments. Component testing and identification, soldering, wire-wrapping and hand tool exercises will be practiced in a lab setting.

## Mathematics (MTH142) (5 credits)

This first level mathematics course for engineering technology programs begins with a review of fundamental concepts, arithmetic operations, and units of measurement. This is followed by an in-depth study of basic algebra, trigonometric and other functions, and quadratic equations.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 2

## Electronic Devices and Circuits (ELN109) (5 credits)

This course is an in-depth analysis of amplifiers, using D.C. and A.C. equivalent circuits, employing BJT's, JFET's, MOSFET's, and linear IC's (OPAMPS). The lab work will include the design, analysis, testing and troubleshooting of amplifiers.

## Computer Aided Design (ELN210) (3 credits)

This course will teach the student the use of computer aided design tools (AUTOCAD) within the electrical

industry. Software will be used to create and modify electrical/electronic schematics, wiring and layout diagrams.

## A.C. Circuit Analysis & Machines (ELR109) (5 credits)

This course is an analytical study of series, parallel and series-parallel A.C. impedance networks, network theorems and polyphase circuits. Concurrently an introduction to A.C. and D.C. motors and generators together with their control methods is studied using complex math.

## Mathematics (MTH143) (5 credits)

This course is a continuation of MTH142 (from Semester I) for engineering technology students. Topics of study include exponents and radicals, plane analytic geometry, solid mensuration, and functions including trigonometric, exponential and logarithmic functions. This course concludes with an introduction to statistics.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

## Semester 3

## Digital Integrated Electronics (ELN115) (6 credits)

This course is the study of digital logic circuits and pulse circuits. The student will study pulse fundamentals, basic digital gates, flip flops counters and registers, A/D and D/A conversion. Practical exercises include circuit analysis, testing, troubleshooting and applications.

## Electronic Devices and Circuits II (ELN213) (4 credits)

This course is a detailed study of control devices and circuits together with their industrial applications. Topics include relays, timing circuits, operational amplifiers, optoelectronics, trigger devices (BJT, UJT, 555 timer), THYRISTOR control devices (SCR, TRIACS). Related practical exercises will consist of circuit design, analysis, testing and trouble-shooting.

## Instrumentation/Process Control (ELN229) (4 credits)

This course introduces the student to the principles of Instrumentation and Process Control. The measurement and control of process variables such as temperature, pressure, level and flow will be studied in detail and applied in the practical component of the course.

## Electrical Power Systems (ELR215) (3 credits)

This course is a study of the production and delivery of electrical power from the generating station to the consumer. Transmission and distribution equipment, system configurations, protection and control and electrical load fundamentals will be discussed and analyzed.

## Introduction to Robotics (ELR216) (2 credits)

This is an introductory course in industrial robotics. Topics covered will include types of robots and their applications, cell design, safety and utilization of simulation/programming software. Students will develop and demonstrate basic programs for control of 6 axis robots.

## Electrical Machines (ELR232) (7 credits)

This course is an analytical study of the characteristics, performance and control of D.C. generators and motors, single and polyphase induction motors, polyphase synchronous machines and transformers, supported by an integrated laboratory program.

## Semester 4

## Robotic and PLC Control Systems (ELR223) (6 credits)

This course will introduce the student with classical control fundamentals and reinforce them through robotic and programmable logic controller applications.

#### **Power Electronics** (ELR236) (7 credits)

This course is an introductory analytical study of A.C. and D.C. motor control utilizing solid-state techniques. The topics include D.C. motor speed control utilizing phase-controlled and chopper converters; and polyphase A.C. motor speed control utilizing six-step and pulse-width modulated inverters and phase-controlled cycloconverters. This course is supported by a well equipped laboratory program.

## Calculus I for Technology (MTH551) (4 credits)

The basic concepts of calculus are introduced through an emphasis on applications and examples. Topics include limits, simple derivatives, derivatives of trigonometric and logarithmic functions, applications of derivatives, curve sketching, integration and applications of integration.

## Industrial Automation Networking I (RAA205) (4 credits)

The student will study the technology and protocols used in industrial networks for process automation.? The TCP/IP 4 layer model will form the basis of the course with a comparison to the OSI 7 layer model.? The theory will be strengthened with hands-on labs in cable making, protocol analysis (RS232, RS485, TCP/IP) as well as building simple client/server networks.? Industrial networks topics such as Ethernet/IP and CAN BUS will also be studied.

## Organizational Effectiveness (ELR214) (4 credits)

Knowledge of the patterns and precedents of the past provide the means for a person to gain awareness of his/her place in contemporary culture. Every organization, as a culture, requires critical elements to be effective. Appreciating the roles and contributions of those elements inform one's understanding of the organizational culture. Some key elements include Quality Assurance, the organization's relevance to consumer well-being and the operation of inter-disciplinary teams. This course will provide insight into historical and current organizational cultures and the need for motivation in them.

#### Semester 5

## Python (CSD105) (3 credits)

The Python programming language, is an easy-to-learn and increasingly popular object-oriented language, that allows students to become comfortable with the fundamentals of programming without the troublesome syntax that can be challenging for novices. With the knowledge acquired using Python, students gain confidence in their skills and learn to recognize the logic behind developing high-quality programs. The course focuses on the use of variables, program structure, control structures, functions and lists.?

The main objective of the course is to set the foundation for other programming languages throughout the duration of the program.? The focus is not to make you an expert Python programmer, but rather have you recognize the main programming constructs that you will encounter in all programming languages.

#### Embedded Microcontrollers I (ELN335) (3 credits)

Students will study the architecture and programming of embedded microcontrollers in computer interfacing applications. Lab activities involving computer interfacing to hardware and the associated software requirements will support the theory.

#### Automated Electrical Systems (ELR320) (7 credits)

A study of computerized techniques for the preparation of schematic diagrams using AUTOCAD; a study of advanced P.L.C. techniques and software to design and document automated electrical systems; interface P.L.C. control to a C.A.M. environment with an industrial robot.

#### Industrial Automation Networking II (ELR326) (4 credits)

Industrial Automation Networking 2 builds on Industrial Automation Networking 1.? This course is job-role specific and enables the student to achieve competency and skills to outline the best practice in designing, configuring, installing, commissioning and trouble-shooting Industrial Automation Networks.? Students will be exposed to multiple industrial network technologies as well as products from industrial suppliers including Rockwell Automation.

#### Calculus II for Technology (MTH577) (4 credits)

This course is a continuation of MTH551 and provides the student with a more advanced study of calculus. Topics of study include methods of integration, first and second order differential equations including Laplace transforms, and series expansions.

## Semester 6

## Embedded Microcontrollers II (ELN340) (4 credits)

This is an application course which will employ embedded microcontrollers and associated hardware to solve more advanced computer interfacing problems.

## Numerical and Network Analysis (ELR309) (7 credits)

An in-depth study of A.C. and D.C. circuits using network theorems, differential equations and Laplace transforms.

## Research Project (ELR311) (3 credits)

The Research Report is intended to demonstrate that the student can function at the Engineering Technology level. The course involves research, design, implementation and reporting on project as agreed upon by the Faculty advisor.

## Automatic Control Systems (ELR315) (6 credits)

An analytical study of closed-loop feedback systems, including mathematical modeling, stability, steady-state errors, and performance improvement as applied to analog and digital systems, including numeric control (NC), computerized numeric control (CNC) and robotics.

## Electrical Power System Analysis and Design (ELR330) (6 credits)

Design and analysis of large and small scale electrical power systems will be studied. Topics will include: Load flow, balanced and unbalanced faults, system stability (classical control theory utilizing Laplace Transform analysis), instrument and power transformers, protective relaying, alternative energy systems and Fourier Series analysis (harmonics).

## Instrumentation and Control Engineering Technician

Section B.88 6/2/2020

**Ontario College Diploma (2 Years - 4 Semesters ) (4104)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This program is not a direct intake. This does not preclude current Sault College Electrical Engineering program students from working towards gaining this additional diploma.

If you are enrolled in any of the following Sault College Electrical Engineering Programs listed below, you may be eligible in your second or third year to take courses that will allow you to gain this additional diploma:

- 4026 Electrical Engineering Technician Process Automation
- 4127 Electrical Engineering Technician Process Automation & Trades
- 4029 Electrical Engineering Technology Process Automation

Please contact the Registrar's Office for further information.

The Instrumentation and Control Engineering Technician program will prepare you to install, calibrate, configure, maintain, service, test, troubleshoot, analyze and upgrade measuring and control devices and systems, which equip process industries.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C, Grade 12 Foundations for College Math (C) MAP4C, or mature student status.

Must be currently enrolled in one of the Sault College Electrical Engineering Programs listed below:

- 4026 Electrical Engineering Technician Process Automation
- 4127 Electrical Engineering Technician Process Automation & Trades
- 4029 Electrical Engineering Technology Process Automation

#### ACADEMIC RECOMMENDATIONS

Grade 12 Mathematics for College Technology (C) MCT4C.

## **CAREER PATHS**

Graduates may be employed by pulp and paper, power generation, mining, petrochemical, natural gas, steel, refining, and water and wastewater treatment industries.

## **OTHER INFORMATION**

For more information contact Bob Allen at 705.759.2554 ext 2522 or email Bob.Allen@saultcollege.ca.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I ELN100-5 Electronic Fundamentals I ELR100-5 Electrical Fundamentals DC ELR114-3 Measurement and Shop Practice MTH142-5 Mathematics GEN100-3 Global Citizenship

#### **SEMESTER 2**

ELN109-5 Electronic Devices and Circuits ELN210-3 Computer Aided Design ELR109-5 A.C. Circuit Analysis & Machines MTH143-5 Mathematics

#### Select one of the following:

#### GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 3**

ELN115-6 Digital Integrated Electronics ELN213-4 Electronic Devices and Circuits II ELN229-4 Instrumentation/Process Control ELR211-5 Fluids and Combustion

#### **SEMESTER 4**

ELR212-5 Process Control ELR223-6 Robotic and PLC Control Systems RAA205-4 Industrial Automation Networking I ELR214-4 Organizational Effectiveness

## **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Electronic Fundamentals I (ELN100) (5 credits)

This is an introduction to the physical principles of semi-conductors and diodes with practical circuit applications. The study of LINEAR DC power supplies and transistor circuit analysis with related laboratory projects is also introduced.

#### Electrical Fundamentals DC (ELR100) (5 credits)

This is an introduction to electrical quantities and units; Ohm's and Kirchoff's Laws; simple DC series, parallel, series-parallel, and voltage divider circuits; simple DC network analysis; magnetism and electromagnetism; inductance and capacitance; DC series RL circuit analysis.

## Measurement and Shop Practice (ELR114) (3 credits)

This course provides an understanding of the operating principles, characteristics, and application of electrical/electronic measuring instruments. Component testing and identification, soldering, wire-wrapping and hand tool exercises will be practiced in a lab setting.

## Mathematics (MTH142) (5 credits)

This first level mathematics course for engineering technology programs begins with a review of fundamental concepts, arithmetic operations, and units of measurement. This is followed by an in-depth study of basic algebra, trigonometric and other functions, and quadratic equations.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 2

## Electronic Devices and Circuits (ELN109) (5 credits)

This course is an in-depth analysis of amplifiers, using D.C. and A.C. equivalent circuits, employing BJT's, JFET's, MOSFET's, and linear IC's (OPAMPS). The lab work will include the design, analysis, testing and troubleshooting of amplifiers.

## Computer Aided Design (ELN210) (3 credits)

This course will teach the student the use of computer aided design tools (AUTOCAD) within the electrical industry. Software will be used to create and modify electrical/electronic schematics, wiring and layout diagrams.

## A.C. Circuit Analysis & Machines (ELR109) (5 credits)

This course is an analytical study of series, parallel and series-parallel A.C. impedance networks, network theorems and polyphase circuits. Concurrently an introduction to A.C. and D.C. motors and generators together with their control methods is studied using complex math.

#### Mathematics (MTH143) (5 credits)

This course is a continuation of MTH142 (from Semester I) for engineering technology students. Topics of study include exponents and radicals, plane analytic geometry, solid mensuration, and functions including trigonometric, exponential and logarithmic functions. This course concludes with an introduction to statistics.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 3

Digital Integrated Electronics (ELN115) (6 credits)

This course is the study of digital logic circuits and pulse circuits. The student will study pulse fundamentals, basic digital gates, flip flops counters and registers, A/D and D/A conversion. Practical exercises include circuit analysis, testing, troubleshooting and applications.

## Electronic Devices and Circuits II (ELN213) (4 credits)

This course is a detailed study of control devices and circuits together with their industrial applications. Topics include relays, timing circuits, operational amplifiers, optoelectronics, trigger devices (BJT, UJT, 555 timer), THYRISTOR control devices (SCR, TRIACS). Related practical exercises will consist of circuit design, analysis, testing and trouble-shooting.

### Instrumentation/Process Control (ELN229) (4 credits)

This course introduces the student to the principles of Instrumentation and Process Control. The measurement and control of process variables such as temperature, pressure, level and flow will be studied in detail and applied in the practical component of the course.

## Fluids and Combustion (ELR211) (5 credits)

This course includes the study of viscosity, pressure, temperature, gas laws, pressure at a depth, manometry, continuity equation, Bernoulli's equation, pitot tubes, orifice and venturi meters, laminar and turbulent flow, combustion and properties of steam.

## Semester 4

## Process Control (ELR212) (5 credits)

This course is a study of process control systems including: single loop, multi-loop, cascade, ratio, feed forward and boiler control. The student will calibrate, adjust, tune, test and maintain these types of control systems.

## Robotic and PLC Control Systems (ELR223) (6 credits)

This course will introduce the student with classical control fundamentals and reinforce them through robotic and programmable logic controller applications.

## Industrial Automation Networking I (RAA205) (4 credits)

The student will study the technology and protocols used in industrial networks for process automation.? The TCP/IP 4 layer model will form the basis of the course with a comparison to the OSI 7 layer model.? The theory will be strengthened with hands-on labs in cable making, protocol analysis (RS232, RS485, TCP/IP) as well as building simple client/server networks.? Industrial networks topics such as Ethernet/IP and CAN BUS will also be studied.

## Organizational Effectiveness (ELR214) (4 credits)

Knowledge of the patterns and precedents of the past provide the means for a person to gain awareness of his/her place in contemporary culture. Every organization, as a culture, requires critical elements to be effective. Appreciating the roles and contributions of those elements inform one's understanding of the organizational culture. Some key elements include Quality Assurance, the organization's relevance to consumer well-being and the operation of inter-disciplinary teams. This course will provide insight into historical and current organizational cultures and the need for motivation in them.

## Mechanical Engineering Technician -Manufacturing

Section B.89 6/2/2020

Ontario College Diploma (2 Years - 4 Semesters ) (4039)705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Mechanical Engineering Technician - Manufacturing program is designed to provide you with the knowledge and skills required to pursue a rewarding career as a Mechanical Technician in the steel, mining, and wind-energy industry. You will receive a strong foundation in a wide variety of industrial applications including how to assist in preparing conventional and computer-assisted design (CAD) engineering designs, drawings and specifications; carry out mechanical tests and analysis of machines, components and materials; help with the design of material handling, drives and maintenance equipment for use in manufacturing processes; assist in the inspection of mechanical installations and conduction projects; and participate in the installation, repair and maintenance of machinery and equipment.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

## A graduate of the Mechanical Engineering Technician Program at Sault College will reliably demonstrate the ability to:

- 1. complete all work in compliance with current legislation, standards, regulations and guidelines.
- 2. apply quality control and quality assurance procedures to meet organizational standards and requirements.
- 3. comply with current health and safety legislation, as well as organizational practices and procedures.
- 4. apply sustainability best practices in workplaces.
- 5. use current and emerging technologies to support the implementation of mechanical engineering projects.
- 6. analyze and solve mechanical problems by applying mathematics and fundamentals of mechanical engineering.
- 7. interpret, prepare and modify mechanical engineering drawings and other related technical documents.
- 8. contribute to the design and the analysis of mechanical components, processes and systems applying fundamentals of mechanical engineering.
- 9. manufacture, assemble, maintain and repair mechanical components according to required specifications.
- 10. verify the specifications of materials, processes and operations to support the design and production of mechanical components.
- 11. contribute to the planning, implementation and evaluation of projects.
- 12. develop strategies for ongoing personal and professional development to enhance work

#### performance.

#### Reference

Ministry of Training, Colleges and Universities Mechanical Engineering Technician Program Standards (MTCU 51007), September 2010.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C, and Grade 12 Foundations for College Math (C) MAP4C, or equivalent, or mature student status.

## **CAREER PATHS**

As a graduate of this two-year program, you may work in a broad range of facilities associated with industries such as steel, mining, pulp and paper, lumber, automotive, food processing and others. You may also pursue further education or apprenticeship training. If you wish to pursue an apprenticeship, you should contact the local office of the Ministry of Colleges & Universities, Apprenticeship Branch at 705.945.6815.

Mechanical engineering technicians perform some or all of the following duties:

- Assist in preparing conventional and computer-assisted design (CAD) engineering designs, drawings and specifications.
- Carry out a limited range of mechanical tests and analyses of machines, components and materials.
- Assist in the design of moulds, tools, dies, jigs and fixtures for use in manufacturing processes.
- Assist in inspection of mechanical installations and construction projects.
- Participate in the installation, repair and maintenance of machinery and equipment.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

For more information contact Donovan Kennedy at 705.759.2554 ext 2581 or email Donovan.Kennedy@saultcollege.ca.

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## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I DRF105-3 Drafting and Blueprint Reading ENV102-3 Industrial Health and Safety MCH121-3 Machine Shop Theory and Measurement MCH134-2 Materials and Fasteners MCH144-4 Machine Shop Practical I MTH145-4 Mathematics WLD121-2 Welding

#### **SEMESTER 2**

ELR111-1 Electric and Electronic Controls MCH141-3 Power Transmission Systems MCH142-3 Pumps, Valves, Piping and Compressors MCH145-4 Machine Shop Practical II MCH244-4 Manufacturing Process MCH253-2 Bearings, Seals and Lubrication MET207-3 Metallurgy RIG101-2 Rigging and Hoisting GEN100-3 Global Citizenship

#### **SEMESTER 3**

CAD225-3 AutoCAD/Drawing and Schematics ELR213-1 Electrical/Electronic Controls II MCH110-4 Applied Mechanics MCH258-4 Pneumatics and Hydraulics MCH259-3 Machine Shop Practical III MTH146-4 Mathematics TNY130-3 Technology in Society

#### **SEMESTER 4**

CAD401-2 Advanced Computer Aided Design MCH103-3 Strength of Materials MCH125-3 Mechanics of Fluids MCH254-2 Preventive/Predictive Maintenance MCH256-3 Introductory Thermodynamics MCH257-3 Machine Technology

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and

respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Drafting and Blueprint Reading (DRF105) (3 credits)

In a hands-on environment students will learn blueprint reading, geometric dimensioning and tolerancing (G.D. & T.) and be introduced to AutoCAD. The course will commence with skill development in blueprint reading. These skills shall be applied to the machinist's trade and related areas. New information has been added to explain computer-aided design, new dimensioning practices, and assembly drawing interpretation. Using common shop terminology, industrial prints will be interpreted. G.D. & T. includes reading dimensional drawings in fractions, decimals and in metric units. AutoCAD is taught so that upon completion students can create computerized, mechanical drawings.

## Industrial Health and Safety (ENV102) (3 credits)

This is an introductory course for all those interested in industrial practices from the standpoint of industrial hygiene and industrial health and safety. Students will become familiar with pertinent legislation, industry and workers rights and responsibilities, recognition, evaluation and control methods and safe working practices.

## Machine Shop Theory and Measurement (MCH121) (3 credits)

This course is designed to give the students an understanding of the theoretical aspects of machining and manufacturing including feeds, speeds, threading and gear cutting formulas. This course is also designed to strengthen the student's ability to measure and inspect to precise tolerances. Tools using micrometer and vernier scales for linear and angular measurement will be used. There will be a basic introduction to Statistical Process Control (SPC), including interpretation and recording of data.

## Materials and Fasteners (MCH134) (2 credits)

To provide students with a working knowledge of the theory behind the procedures that are used in the heat treating and machining of carbon steels, aluminum and its alloys. Practical lab/shop activities will be used to enhance and/or demonstrate theoretical concepts where possible.

## Machine Shop Practical I (MCH144) (4 credits)

A study of shop machines, safety, and tool care, measurements and layout, bench work and hard tools, material identification, heat treatment and testing, basic lathe, saws, drill presses, shapers, grinder, and milling machine, theory and practices, speeds, feeds, tapers, threads.

## Mathematics (MTH145) (4 credits)

This first level mathematics course for engineering technology programs begins with a review of fundamental concepts including arithmetic operations and concepts in measurement. This is followed by several algebra topics including linear equations, factoring, fractions and quadratic equations. A treatment of trigonometry of right triangles, the trigonometric functions of any angle and of oblique triangles is also included.

The goals of this course are, first, to show that mathematics does play a most important role in the development and understanding of the various fields of technology and, secondly, to ensure that students acquire the mathematical and critical thinking skills necessary to analyze and solve engineering technology problems.

## Welding (WLD121) (2 credits)

A trades curriculum that has been designed to provide students with a combination of theoretical knowledge and hands-on skill in relation to the safe use and operation of both OFG/SMA welding, cutting and heating equipment.

#### Semester 2

## Electric and Electronic Controls (ELR111) (1 credits)

This course will provide students with the basic knowledge of electric and electronic theory. Students will learn about the purpose, scope of electrical codes, purpose and function of electrical components, selection and safe use of electrical instruments and electric and electron principles. They will also understand and be able to apply OHM's law including units and relationships.

### Power Transmission Systems (MCH141) (3 credits)

A trades course designed to provide students with knowledge of power transmission systems such as belt drives, chains, gears, shafts and couplings.

### Pumps, Valves, Piping and Compressors (MCH142) (3 credits)

In this course, the student will learn about the different applications, installation, maintenance and types of pumps, valves, piping, compressors and ancillary equipment.

## Machine Shop Practical II (MCH145) (4 credits)

This course will continue to build on the study of shop machines, safety, and tool care, measurements and layout, bench work and hard tools, material identification, heat treatment and testing, basic lathe, saws, drill presses, grinder, and milling machine, theory and practices, speeds, feeds, tapers, and threads.

## Manufacturing Process (MCH244) (4 credits)

A job planning course to cover shop organization costing, routing and scheduling, various processes as to viability and methods including foundry processes, hard mould casting, die casting, plastics and rubbers, primary metal working, welding, forging and comparisons as to quality, economics and feasibility.

## Bearings, Seals and Lubrication (MCH253) (2 credits)

Students will learn about selecting, installing and maintaining friction/plain and rolling element bearings and static and dynamic seals. They will learn to interpret ISO charts and bearing catalogues. Students will also learn about bearing lubricants and their proper application.

#### Metallurgy (MET207) (3 credits)

A combination of lab and theory designed to provide Mechanical Drafting Technicians with the basics of metallurgy. More specifically, it deals with the production of iron and steel; heat treating methods and surface treatments; the shaping and forming of metal; as well as the properties of metals.

#### Rigging and Hoisting (RIG101) (2 credits)

This course is designed to provide the student with the knowledge and understanding of correct lifting and hoisting procedures and the safe use of all equipment.

#### **Global Citizenship** (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 3

## AutoCAD/Drawing and Schematics (CAD225) (3 credits)

Students will learn to effectively use manufacturers manuals, sketch and draw machine component parts, including sectional views. This course will introduce the student to the fundamentals of computer assisted drafting using AutoCAD.

#### Electrical/Electronic Controls II (ELR213) (1 credits)

Students will learn the basic knowledge of electric and electronic controls. Students will learn about safely removing and resetting electrical and electronic devices such as fuses, circuit breakers and about lockouts and shut off procedures. The student will also learn about diagnostic testing and application of electronic devices used in control systems.

### Applied Mechanics (MCH110) (4 credits)

This course entails a thorough study of statics, providing fundamental skill for further development in mechanical studies. Topics include: force vectors, components, resultants, moments, couples, equilibrium in force systems, trusses and frames, centrolds, friction laws, impending motion.

## Pneumatics and Hydraulics (MCH258) (4 credits)

Students will learn to identify and explain pneumatic and hydraulic system components, and understand the basic principles of operation. Circuit diagrams will be used as an aid for assembling and troubleshooting hydraulic systems.

## Machine Shop Practical III (MCH259) (3 credits)

This course will continue to build on the study of shop machines, with emphasis on the use of milling machines.

## Mathematics (MTH146) (4 credits)

This course is a continuation of MTH145 for engineering and technology students. Topics of study include geometry, exponents and radicals, exponential and logarithmic functions, variation, plane analytic geometry, statistics, and graphs of trigonometric functions. This course is suitable for students studying at the technician level.

## Technology in Society (TNY130) (3 credits)

This course will introduce students to the impact that technological change has on society. Illustrations and examples will be drawn from the students discipline. Potential topics include the social and economic impact of new technology, responsibilities and ethics, privacy, liability and technology-based crime, and emerging trends.

It is designed to provide students from varied programs and backgrounds with a particularly relevant and timely appreciation of the impact technology and technological advances have made on every aspect of society. Technology and its implementation in society have strengths, weaknesses, opportunities and threats. This course investigates the social, legal, and ethical issues the use of technology raises.

#### Semester 4

## Advanced Computer Aided Design (CAD401) (2 credits)

The students will learn modern computer aided design using some of the various programs available that are used in industry today. This course will build on the students knowledge and enable them to produce workable CAD drawings ready for industry.

#### Strength of Materials (MCH103) (3 credits)

Basic concepts, stress and strain, Hooke's law, Young's modulus, temperature stresses, thin walled cylinders, factor of safety, structural shapes, riveted and bolted connections, first and second moment of areas, and shear and bending diagrams are studied.

#### Mechanics of Fluids (MCH125) (3 credits)

This course is an introduction to fluids their properties and coherent units of measurement, pressure, vapour pressure. vacuum. Pascal's Law with an emphasis on pressure measuring devices: buovancy.

Bernoulli's equation, flow of fluids, velocity and flow measuring instruments

#### Preventive/Predictive Maintenance (MCH254) (2 credits)

The student will learn about the procedures, equipment used and the processes associated with a preventive/predictive maintenance program. Topics include the various approaches to maintenance, and vibration monitoring and analysis.

#### Introductory Thermodynamics (MCH256) (3 credits)

This course covers the basic principles of thermodynamics. Topics include heat transfer, specific heat, thermal expansion and conductive, convective and radiant heat.

#### Machine Technology (MCH257) (3 credits)

In this course, students will develop knowledge of material handling systems, prime movers, fans and blowers. The principles of operation, applications, installation and maintenance will be covered.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Mechanical Engineering Technology

Section B.90 6/2/2020



**Ontario College Advanced Diploma (3 Years - 6 Semesters ) (4043)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

The three-year Mechanical Engineering Technology program prepares you for a career in engineering to assist engineers in design analysis and supervisory functions in the production of components in a mechanical engineering environment, as well as carry out manufacturing and quality control procedures. You will be able to apply communication, documentation, computer applications, information technology, and teamwork skills to support the engineering activities of an organization.

Direct entry to this program requires completion of a 2-Year Mechanical Technician Program and successful completion of MTH551 (Calculus) course and MCH125 (Mechanics of Fluids) course.

Thru-way programs offer diplomas at the completion of Year 2. The third year of this program is offered through Northern Colleges Collaboration Program (NCCP) through web-conferencing software using computers, laptops or mobile device with a headset or earbuds with a microphone and some labs may be delivered on campus. Classes are delivered in synchronous format and students will have access to all college services at the college where they register for the program.

Click here to learn more about Northern Colleges Collaboration Program (NCCP).

PROGRAM OUTCOMES MTCU Code: 61007

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Completion of a 2-Year Mechanical Technician Program and successful completion of MTH551 (Calculus) course and MCH125 (Mechanics of Fluids) course are required for direct entry to the third year of this program.

## **CAREER PATHS**

Graduates of the Mechanical Engineering Technology Program work in a broad range of employment settings in a variety of sectors in the mechanical engineering industry in both large and small organizations which are present in Sault Ste. Marie. Their activities could range from computer-aided design and manufacturing, to industry sales, or to junior management in the mechanical field.

## **OTHER INFORMATION**

For more information contact Donovan Kennedy at 705.759.2554 ext 2581 or email Donovan.Kennedy@saultcollege.ca.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I DRF105-3 Drafting and Blueprint Reading ENV102-3 Industrial Health and Safety MCH121-3 Machine Shop Theory and Measurement MCH134-2 Materials and Fasteners MCH144-4 Machine Shop Practical I MTH142-5 Mathematics WLD121-2 Welding

#### **SEMESTER 2**

ELR111-1 Electric and Electronic Controls MCH141-3 Power Transmission Systems MCH142-3 Pumps, Valves, Piping and Compressors MCH145-4 Machine Shop Practical II MCH244-4 Manufacturing Process MCH253-2 Bearings, Seals and Lubrication MET207-3 Metallurgy RIG101-2 Rigging and Hoisting GEN100-3 Global Citizenship

#### **SEMESTER 3**

CAD225-3 AutoCAD/Drawing and Schematics ELR213-1 Electrical/Electronic Controls II MCH110-4 Applied Mechanics MCH258-4 Pneumatics and Hydraulics MCH259-3 Machine Shop Practical III MTH143-5 Mathematics TNY130-3 Technology in Society

#### **SEMESTER 4**

CAD401-2 Advanced Computer Aided Design MCH103-3 Strength of Materials MCH125-3 Mechanics of Fluids MCH254-2 Preventive/Predictive Maintenance MCH256-3 Introductory Thermodynamics MCH257-3 Machine Technology MTH551-4 Calculus I for Technology

#### Select one of the following:

GEN110: Student Selected General Education

### **SEMESTER 5**

MCH501-4 Engineering Operations Management MCH502-3 Advanced Dynamics MCH503-2 Mechancial Lab I MCH504-3 Research Project I MCH506-3 Advanced Fluid Mechanics MTH577-4 Calculus II for Technology

#### **SEMESTER 6**

MCH601-3 Advanced Dynamics of Machines

MCH603-4 Research Project II MCH605-3 Mechanical Lab II MCH607-3 Metrology and Quality Control MCH608-3 Advanced Strength of Materials MCH609-3 Machine Design MCH610-2 Applied Thermodynamics and Heat Transfer

## **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Drafting and Blueprint Reading (DRF105) (3 credits)

In a hands-on environment students will learn blueprint reading, geometric dimensioning and tolerancing (G.D. & T.) and be introduced to AutoCAD. The course will commence with skill development in blueprint reading. These skills shall be applied to the machinist's trade and related areas. New information has been added to explain computer-aided design, new dimensioning practices, and assembly drawing interpretation. Using common shop terminology, industrial prints will be interpreted. G.D. & T. includes reading dimensional drawings in fractions, decimals and in metric units. AutoCAD is taught so that upon completion students can create computerized, mechanical drawings.

## Industrial Health and Safety (ENV102) (3 credits)

This is an introductory course for all those interested in industrial practices from the standpoint of industrial hygiene and industrial health and safety. Students will become familiar with pertinent legislation, industry and workers rights and responsibilities, recognition, evaluation and control methods and safe working practices.

## Machine Shop Theory and Measurement (MCH121) (3 credits)

This course is designed to give the students an understanding of the theoretical aspects of machining and manufacturing including feeds, speeds, threading and gear cutting formulas. This course is also designed to strengthen the student's ability to measure and inspect to precise tolerances. Tools using micrometer and vernier scales for linear and angular measurement will be used. There will be a basic introduction to Statistical Process Control (SPC), including interpretation and recording of data.

#### Materials and Fasteners (MCH134) (2 credits)

To provide students with a working knowledge of the theory behind the procedures that are used in the heat treating and machining of carbon steels, aluminum and its alloys. Practical lab/shop activities will be used to enhance and/or demonstrate theoretical concepts where possible.

## Machine Shop Practical I (MCH144) (4 credits)

A study of shop machines, safety, and tool care, measurements and layout, bench work and hard tools, material identification, heat treatment and testing, basic lathe, saws, drill presses, shapers, grinder, and milling machine, theory and practices, speeds, feeds, tapers, threads.

#### Mathematics (MTH142) (5 credits)

This first level mathematics course for engineering technology programs begins with a review of fundamental concepts, arithmetic operations, and units of measurement. This is followed by an in-depth

study of basic algebra, trigonometric and other functions, and quadratic equations.

### Welding (WLD121) (2 credits)

A trades curriculum that has been designed to provide students with a combination of theoretical knowledge and hands-on skill in relation to the safe use and operation of both OFG/SMA welding, cutting and heating equipment.

## Semester 2

### Electric and Electronic Controls (ELR111) (1 credits)

This course will provide students with the basic knowledge of electric and electronic theory. Students will learn about the purpose, scope of electrical codes, purpose and function of electrical components, selection and safe use of electrical instruments and electric and electron principles. They will also understand and be able to apply OHM's law including units and relationships.

## Power Transmission Systems (MCH141) (3 credits)

A trades course designed to provide students with knowledge of power transmission systems such as belt drives, chains, gears, shafts and couplings.

## Pumps, Valves, Piping and Compressors (MCH142) (3 credits)

In this course, the student will learn about the different applications, installation, maintenance and types of pumps, valves, piping, compressors and ancillary equipment.

## Machine Shop Practical II (MCH145) (4 credits)

This course will continue to build on the study of shop machines, safety, and tool care, measurements and layout, bench work and hard tools, material identification, heat treatment and testing, basic lathe, saws, drill presses, grinder, and milling machine, theory and practices, speeds, feeds, tapers, and threads.

### Manufacturing Process (MCH244) (4 credits)

A job planning course to cover shop organization costing, routing and scheduling, various processes as to viability and methods including foundry processes, hard mould casting, die casting, plastics and rubbers, primary metal working, welding, forging and comparisons as to quality, economics and feasibility.

## Bearings, Seals and Lubrication (MCH253) (2 credits)

Students will learn about selecting, installing and maintaining friction/plain and rolling element bearings and static and dynamic seals. They will learn to interpret ISO charts and bearing catalogues. Students will also learn about bearing lubricants and their proper application.

#### Metallurgy (MET207) (3 credits)

A combination of lab and theory designed to provide Mechanical Drafting Technicians with the basics of metallurgy. More specifically, it deals with the production of iron and steel; heat treating methods and surface treatments; the shaping and forming of metal; as well as the properties of metals.

## Rigging and Hoisting (RIG101) (2 credits)

This course is designed to provide the student with the knowledge and understanding of correct lifting and hoisting procedures and the safe use of all equipment.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 3

#### AutoCAD/Drawing and Schematics (CAD225) (3 credits)

Students will learn to effectively use manufacturers manuals, sketch and draw machine component parts, including sectional views. This course will introduce the student to the fundamentals of computer assisted drafting using AutoCAD.

#### Electrical/Electronic Controls II (ELR213) (1 credits)

Students will learn the basic knowledge of electric and electronic controls. Students will learn about safely removing and resetting electrical and electronic devices such as fuses, circuit breakers and about lockouts and shut off procedures. The student will also learn about diagnostic testing and application of electronic devices used in control systems.

#### Applied Mechanics (MCH110) (4 credits)

This course entails a thorough study of statics, providing fundamental skill for further development in mechanical studies. Topics include: force vectors, components, resultants, moments, couples, equilibrium in force systems, trusses and frames, centrolds, friction laws, impending motion.

#### Pneumatics and Hydraulics (MCH258) (4 credits)

Students will learn to identify and explain pneumatic and hydraulic system components, and understand the basic principles of operation. Circuit diagrams will be used as an aid for assembling and troubleshooting hydraulic systems.

#### Machine Shop Practical III (MCH259) (3 credits)

This course will continue to build on the study of shop machines, with emphasis on the use of milling machines.

#### Mathematics (MTH143) (5 credits)

This course is a continuation of MTH142 (from Semester I) for engineering technology students. Topics of study include exponents and radicals, plane analytic geometry, solid mensuration, and functions including trigonometric, exponential and logarithmic functions. This course concludes with an introduction to statistics.

#### Technology in Society (TNY130) (3 credits)

This course will introduce students to the impact that technological change has on society. Illustrations and examples will be drawn from the students discipline. Potential topics include the social and economic impact of new technology, responsibilities and ethics, privacy, liability and technology-based crime, and emerging trends.

It is designed to provide students from varied programs and backgrounds with a particularly relevant and timely appreciation of the impact technology and technological advances have made on every aspect of society. Technology and its implementation in society have strengths, weaknesses, opportunities and threats. This course investigates the social, legal, and ethical issues the use of technology raises.

#### Semester 4

#### Advanced Computer Aided Design (CAD401) (2 credits)

The students will learn modern computer aided design using some of the various programs available that are used in industry today. This course will build on the students knowledge and enable them to produce workable CAD drawings ready for industry.

#### Strength of Materials (MCH103) (3 credits)

Basic concepts, stress and strain, Hooke's law, Young's modulus, temperature stresses, thin walled cylinders, factor of safety, structural shapes, riveted and bolted connections, first and second moment of areas, and shear and bending diagrams are studied.

#### Mechanics of Fluids (MCH125) (3 credits)

This course is an introduction to fluids their properties and coherent units of measurement, pressure, vapour pressure, vacuum, Pascal's Law with an emphasis on pressure measuring devices; buoyancy, Bernoulli's equation, flow of fluids, velocity and flow measuring instruments

#### Preventive/Predictive Maintenance (MCH254) (2 credits)

The student will learn about the procedures, equipment used and the processes associated with a preventive/predictive maintenance program. Topics include the various approaches to maintenance, and vibration monitoring and analysis.

#### Introductory Thermodynamics (MCH256) (3 credits)

This course covers the basic principles of thermodynamics. Topics include heat transfer, specific heat, thermal expansion and conductive, convective and radiant heat.

#### Machine Technology (MCH257) (3 credits)

In this course, students will develop knowledge of material handling systems, prime movers, fans and blowers. The principles of operation, applications, installation and maintenance will be covered.

#### Calculus I for Technology (MTH551) (4 credits)

The basic concepts of calculus are introduced through an emphasis on applications and examples. Topics include limits, simple derivatives, derivatives of trigonometric and logarithmic functions, applications of derivatives, curve sketching, integration and applications of integration.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 5

#### Engineering Operations Management (MCH501) (4 credits)

In this course students will learn concepts required to design and operate competitive manufacturing/industrial systems. Topics include product-production design interaction, facilities location and layout, material handling, work measurement, financial compensation, human factors, operations planning and control, quality control, linear programming, inventory control, and project management.

#### Advanced Dynamics (MCH502) (3 credits)

In this course students learn about kinematics of particles: rectilinear motion, planar curvilinear motion using various coordinate frames (such as rectangular, normal-tangential and radial-transverse), and analysis using Newton?s Second Law. Students also study the kinematics of rigid bodies: translation, rotation, general planar motion, forces and accelerations, mass moment of inertia, and static forces in machines.

#### Mechancial Lab I (MCH503) (2 credits)

The Mechanical Lab 1 course supplements and supports the Advanced Fluid Mechanics and Advanced Dynamics courses with practical learning. Lab topics in Advanced Fluid Mechanics include application of the Energy Principle, experimental determination of minor losses and losses in series/parallel pipeline systems, and pump selection. Lab topics in Dynamics include plane motion and inertial forces.

#### Research Project I (MCH504) (3 credits)

In the two Research Project courses, students complete an independent technical project. These courses mirror working conditions that are frequently encountered in industry; that is, they are a self-directed, comprehensive study of a specific topic in the student's field, one not covered in other courses. In Research Project I, students prepare a detailed project schedule, meet weekly with faculty and industry advisors, prepare weekly progress reports, and deliver a formal technical project proposal. Students begin work on the project in this course in preparation for project completion in Research Project II.

## Advanced Fluid Mechanics (MCH506) (3 credits)

A study of gas laws-isothermal, adiabatic, polytropic, combustion, properties of steam, manometry, pressure at a depth, centre of pressure, Bernoulli's Theorem, Venturimeter, losses in pipes.

## Calculus II for Technology (MTH577) (4 credits)

This course is a continuation of MTH551 and provides the student with a more advanced study of calculus. Topics of study include methods of integration, first and second order differential equations including Laplace transforms, and series expansions.

## Semester 6

## Advanced Dynamics of Machines (MCH601) (3 credits)

In this course students learn Kinetics of particles, work of a force, kinetic energy, principle of work and energy, power and efficiency; potential energy, conservative forces and conservation of energy; principle of impulse and momentum, impulsive motion; impact, System of particles, Effective forces, liner and angular momentum, motion of mass centre, angular momentum about its mass centre, conservation of momentum; work-energy principle and conservation of energy, principle of impulse and momentum; Plane dynamics of rigid bodies, work-energy principle, momentum principles for a system of particles, work and kinetics energy, conservation of energy; principle of impulse and momentum, conservation of angular motion; impulsive motion and eccentric impact; Three-dimensional kinematics of rigid bodies, motion about a fixed point and general motion, velocities and accelerations. Students also learn mechanism displacement diagrams of machine members by relative velocity method, instantaneous centers, velocity polygon, relative acceleration polygon, coriolis acceleration, and straight and curved links; machine dynamics which includes inertia force method and analysis of translation, rotation, and plane motion, balancing rotating and reciprocating masses, and whirling of shafts.

## Research Project II (MCH603) (4 credits)

In the two Research Project courses, students complete an independent technical project. These courses mirror working conditions that are frequently encountered in industry; that is, they are a self-directed, comprehensive study of a specific topic in the student's field, one not covered in other courses. Research Project II is a continuation of Research Project I, where students continue to work on their project, meet with faculty and industry advisors, and prepare written progress reports. ?Students also learn the theory necessary for the preparation, writing, and oral defence of a formal technical report. Students do a presentation of the formal technical report on their completed project.

## Mechanical Lab II (MCH605) (3 credits)

The Mechanical Lab II course supplements and supports the Advanced Strength of Materials, Advanced Dynamics of Machines, Machine Design, and Applied Thermodynamics & Heat Transfer courses with practical learning. Lab topics in Advanced Strength of Materials include stresses in beams, deflection in beams, and columns. Lab topics in the Advanced Dynamics of Machines include forces in machines and balancing rotating/reciprocating masses. Lab topics in Machine Design include connections, material strength, and power transmission. Lab topics in Applied Thermodynamics include heat transfer and psychrometry.

### Metrology and Quality Control (MCH607) (3 credits)

A lab course taught by theory and experimentation to study sources of error, standards of length, interferometry, angular measurement, the autocellimator, R.M.S. finishes, screw thread and gear elements, metallurgical testing and calibration.

### Advanced Strength of Materials (MCH608) (3 credits)

Torsion shafts and couplings, properties of sections, shear force and bending moment diagrams in beams, flexure formula, shearing stresses due to bending, design of beams, materials, testing, columns will all be covered in this course.

#### Machine Design (MCH609) (3 credits)

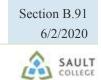
This course deals with stress analysis, anti-friction bearings, lubrication and journal bearings, stress concentrations, theories of failure, fatigue and endurance limits, selection of materials and consideration in production methods, graphical analysis, mohrs circle of stress.

## Applied Thermodynamics and Heat Transfer (MCH610) (2 credits)

Rankin cycle, mixtures, psychrometry, air conditioning, heat transfer mechanisms and exchangers are discussed in this course.

## **Robotics and Automation**

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (4073)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

**Please Note:** This is the new program name and program number for students entering the program in September 2020. It was formerly called Robotics and Advanced Automation (Program 4068). International students would have received a Letter of Acceptance to Robotics and Advanced Automation (4068) prior to the program name change. Effective April 28, 2020 the only change to the program is the program number and title itself. All learning outcomes remain the same.

The Robotics and Advanced Automation program at Sault College will help students gain knowledge, expertise and professional skills related to robotic applications and automation used in various sectors of industry. These industries include manufacturing, food packaging, medical, aerospace and many more. This program features a new, world class laboratory equipped with the latest robotics equipment installed in a simulated manufacturing environment.

#### **PROGRAM OUTCOMES**

The following are the Vocational Learning Outcomes of the Robotics and Advanced Automation Program:

- 1. Construct and evaluate robotic control programs for various scenarios against which to model the functionality and stability of automation systems.
- 2. Plan and lead the installation of new industrial equipment and its physical and digital integration with existing systems.
- 3. Collaborate with health and safety personnel to develop plans and specifications that incorporate, among other elements, safety controls and physical guarding to comply with all applicable regulatory safety designs and standards used in industrial robotic applications.
- 4. Assist in the assessment and management of robotic systems by applying business principles to the electromechanical environment.
- 5. Validate and optimize the functioning of motor, drive, control, and robotic systems.
- 6. Integrate budgetary, technical, functional and safety considerations in the design and optimization of custom automation solutions.
- 7. Formulate and use a variety of troubleshooting techniques on new and legacy electromechanical equipment, processes, systems and subsystems.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

A College Diploma or University Degree in a related field such as Electrical, Mechanical, Mechatronics or Metal Fabrication.

Candidates with related industry experience may also be granted admission at the discretion of the program Dean.

## **CAREER PATHS**

This graduate certificate program will prepare students to enter the cutting edge technology field of robotics and automation as a robot programmer, robotic vision technician and robotic welder.

Graduates can find employment in Automotive and Aerospace Manufacturing, Food and Beverage Industries, Pharmaceutical Industries, Original Equipment Manufacturers, System Integrators, and Automation Distribution and Sales.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,476.20	\$1,117.00	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

For more information contact Program Coordinator Donovan Kennedy at 705.759.2554 ext 2581 or email <u>Donovan.Kennedy@saultcollege.ca</u>.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

RAA104-3 Manufacturing Processes RAA106-2 Robot Mechanics RAA110-5 Robot Programming I RAA111-6 Robot Cell Design, Peripherals, and Safety RAA112-3 Applications of Robotics with Solid Modelling

#### **SEMESTER 2**

RAA201-5 Applications of Robotics with Vision RAA202-4 PLC and Interfacing RAA204-3 Project Course RAA205-4 Industrial Automation Networking I RAA210-5 Robot Programming II

## **Course Descriptions**

#### Semester 1

#### Manufacturing Processes (RAA104) (3 credits)

This course deals with typical manufacturing processes that utilize robots. The student will analyse various business cases and propose robotic solutions that will increase productivity and achieve beneficial return on investment.

Robot Mechanics (RAA106) (2 credits)

This course deals with basic kinematic concepts involved in calculating a robot's position in space as well as

tool and base robot frames.

### Robot Programming I (RAA110) (5 credits)

This course deals with an introduction to robot programming, coordinate systems and simulation software. Students will work collaboratively on projects to gain knowledge of robotic concepts.

## Robot Cell Design, Peripherals, and Safety (RAA111) (6 credits)

This course deals with typical cell designs as well as best practices for safety and safety devices. A variety of hardware and software devices and applications will also be covered including end effectors, sensors, tool changers, dress packages and robotic welding.

## Applications of Robotics with Solid Modelling (RAA112) (3 credits)

The purpose of this course is to familiarize students with Solid Works, a parametric design application used commonly for Mechanical/Industrial and Robotic solid modelling. The course is designed to provide students with an experiential learning environment through a process or task based approach to learning the individual features and functions of Solid Works, thereby emphasizing processes and procedures for completion of any task. The course begins with an overview of the sketching environment where students learn to create 2D objects such as lines and arcs. Definition is then added to sketch including dimensions and geometric relationships. You will learn the fundamentals of solid modelling using extrusions, rotations, lofts, patterns and sketching tools. Solids are then quickly created by converting the sketches into 3D models. Solids are then arranged into assemblies where interference and motion can be studied. Professional technical drawings can then be generated in accordance with Industry standards. Students attending this course are expected to have some experience with computers and WindowsTM operating system. Some knowledge of the principles of drafting or design is helpful.

## Semester 2

## Applications of Robotics with Vision (RAA201) (5 credits)

The student will learn how to incorporate vision systems into their robot applications as well as learn about proper illumination techniques for cameras.

#### PLC and Interfacing (RAA202) (4 credits)

This course will extend the students` understanding of programmable logic controllers and allow them to communicate to an industrial robot using ladder logic.

#### Project Course (RAA204) (3 credits)

The student will be able to utilize their knowledge they have gained in robotics to work collaboratively on an automation projection and manage a project timeline.

#### Industrial Automation Networking I (RAA205) (4 credits)

The student will study the technology and protocols used in industrial networks for process automation.? The TCP/IP 4 layer model will form the basis of the course with a comparison to the OSI 7 layer model.? The theory will be strengthened with hands-on labs in cable making, protocol analysis (RS232, RS485, TCP/IP) as well as building simple client/server networks.? Industrial networks topics such as Ethernet/IP and CAN BUS will also be studied.

#### Robot Programming II (RAA210) (5 credits)

This course is a continuation of RAA110 and extends the students learning of robotics. Students will work collaboratively on projects to gain knowledge of robotic concepts.

# **English for Academic Purposes**

Section B.92 6/2/2020

Certificate (16 Weeks ) (1290) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

This College Certificate program is intended for students interested in improving their English language skills in order to pursue a diploma program at the post-secondary level at Sault College. This program is for students who don't currently meet the College's IELTs requirements, but who have some English proficiency (i.e., minimum average 5.0 IELTs or equivalent).

The program is offered in two 8 week blocks. It is anticipated that students would then enter a diploma program in the next available semester.

This program would allow students to familiarize themselves with Sault College's campus and college life, upgrade their English skills by practicing oral and written communication skills, and understand the college's expectations regarding academic integrity, managing course work and navigating college life.

Emphasis is on building academic oral and written communication skills. Students will learn through interactive classroom and community-based activities.

## **PROGRAM OUTCOMES**

1. Develop, through general knowledge gained in a wide range of subjects, insights into both self and society.

2. Communicate competently at a level required for college studies, showing flexibility and clarity of thought and expression.

3. Utilize critical thinking processes and problem solving techniques to anticipate problems related to language application in academic and workplace contexts.

4. Employ basic English language skills required for college studies and/or the workplace, by preparing students to enter first level College communication courses.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Applicants, whose first language is not English, must provide proof of English proficiency.

Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements. Students are eligible to study with an IELTS average score in range of 5. 0 level (average across all bands) or equivalency.

This is an entry-level bridging program.

Students must obtain a grade of 70% or higher to pass each course.

Students must obtain a G.P.A. of 70% or higher to obtain this certificate.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
N/A	N/A	N/A	N/A

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

The first intake of this program is scheduled for the fall term, beginning in September 2020.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

EAP100-3 Academic Reading - IELTS Level 4 EAP101-3 Academic Writing - IELTS Level 4 EAP102-3 Academic Listening and Speaking - IELTS Level 4 EAP103-2 Enhanced Reading and Writing - IELTS Level 4 EAP104-2 Academic Reading - IELTS Level 5 EAP105-3 Academic Writing - IELTS Level 5 EAP200-3 Academic Listening and Speaking - IELTS Level 5 EAP201-3 Enhanced Reading and Writing - IELTS Level 5 EAP202-2 Academic Reading - IELTS Level 6 EAP203-3 Academic Writing - IELTS Level 6 EAP204-3 Academic Listening and Speaking - IELTS Level 6 HDG122-3 Personal and Academic Success Strategies

## **Course Descriptions**

#### Semester 1

#### Academic Reading - IELTS Level 4 (EAP100) (3 credits)

Strong reading skills are necessary for academic and workplace success. Students increase reading speed and comprehension while using skills and strategies to understand adapted and authentic passages on a wide variety of topics. Through intensive and extensive reading assignments, students summarize and respond to texts, with an emphasis on accuracy and clarity.

#### Academic Writing - IELTS Level 4 (EAP101) (3 credits)

Clear and accurate writing is required in academic and workplace environments. Extensive feedback received from instructors is used by students to enhance their writing skills and complete a wide range of assignments. Exploration of sentence structure and grammar enables students to produce simple, compound and complex sentences. Students practice brainstorming and planning methods to produce clear, well-organized writing.

#### Academic Listening and Speaking - IELTS Level 4 (EAP102) (3 credits)

The ability to understand oral speech and to express oneself accurately and fluently are the keys to successful communication in social, academic and workplace environments. For natural and clear oral

expression, students apply grammatical structures and fluency strategies. Students build confidence in speaking to peers through academic discussions and short presentations. Using listening strategies, students record information accurately, identify patterns of organization and give personal reflections on a topic.

## Enhanced Reading and Writing - IELTS Level 4 (EAP103) (2 credits)

Mid-intermediate students need to reinforce the reading and writing skills they have acquired. Through a variety of integrated tasks, students improve the efficiency and accuracy of their comprehension and production of passages of moderate length. Focus is on further developing and applying reading strategies, practicing extensive reading and improving the quality of writing in paragraph and multiple paragraph form.

## Academic Reading - IELTS Level 5 (EAP104) (2 credits)

Reading skills are essential for success in academic and workplace environments. Students build on and apply reading skills and strategies to increase comprehension, fluency and vocabulary. Students read both adapted and authentic passages on a wide range of topics and summarize and respond to the texts, with a focus on accurate content and clear expression.

## Academic Writing - IELTS Level 5 (EAP105) (3 credits)

Clear and accurate writing is required in academic and workplace environments. Students learn structures and grammar to produce complex sentences that fulfill a range of communicative functions. Students apply writing process techniques to perform a variety of written communication tasks. Using extensive feedback from instructors, students systematically apply proofreading and editing skills to locate and correct common writing errors and improve written work.

## Academic Listening and Speaking - IELTS Level 5 (EAP200) (3 credits)

Listening comprehension skills as well as clear and accurate self-expression are essential for effective communication in social, academic and workplace settings. Students identify key information and patterns of organization in a variety of adapted and authentic listening texts. Students use pre-listening and note-taking strategies to create outlines and spoken or written responses to listening passages. Through small group and presentation activities on a wide range of academic subjects, students continue to build accuracy and fluency.

## Enhanced Reading and Writing - IELTS Level 5 (EAP201) (3 credits)

High-intermediate students need to reinforce their reading and writing skills. Students increase their reading proficiency through the use of strategies and extensive reading. Focus is on improving the quality of writing skills at both the paragraph and the short essay level.

## Academic Reading - IELTS Level 6 (EAP202) (2 credits)

Reading skills are essential for success in academic and workplace environments. Students increase reading comprehension, fluency and vocabulary by building on and applying reading skills and strategies. Through intensive and extensive reading assignments, students read both authentic and adapted passages in a variety of subject areas and summarize and respond to the passages, with an emphasis on accuracy and clarity.

## Academic Writing - IELTS Level 6 (EAP203) (3 credits)

Clear and accurate writing is required in academic and workplace environments. Students use appropriate structures and grammar to produce complex sentences that fulfill a range of communicative functions. Students apply writing process techniques to perform a variety of written communication tasks. Using extensive feedback from instructors, students systematically apply proofreading and editing skills to locate and correct common writing errors and improve written work.

## Academic Listening and Speaking - IELTS Level 6 (EAP204) (3 credits)

Listening comprehension skills as well as clear and accurate self-expression are essential for effective communication in social, academic and workplace settings. Students practice accuracy and fluency through

group activities on a variety of academic subjects. Students use listening strategies to create outlines and spoken or written responses to adapted and authentic listening passages.

## Personal and Academic Success Strategies (HDG122) (3 credits)

This course will prepare you for the rigors of academic life and enable you to develop a personal profile for college and career success. The main focus of this course will include accepting personal responsibility, discovering self-motivation, mastering self-management, employing interdependence, gaining self-awareness, adopting lifelong learning, and developing emotional intelligence. In addition, you will develop and produce a `Personal Profile` that will identify your personal learning style, communication style, and personality style to enable you to achieve success in learning about, understanding, and choosing the courses and careers that will lead to personal and professional satisfaction.

## General Arts and Science - English for Academic Purposes

Section B.93 6/2/2020

**Ontario College Certificate (1 Year - 2 Semesters ) (1295)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This Ontario College Certificate program is intended for students interested in improving their English language skills in order to pursue a diploma program at the post- secondary level at Sault College. This program is for students who don't currently meet the College's English Proficiency requirements, but who have some English proficiency (i.e., minimum average 4.5 IELTS or equivalent).

This program would allow students to familiarize themselves with Sault College's campus and college life, upgrade their English skills by practicing oral and written communication skills, and understand the college's expectations regarding academic integrity, managing course work and navigating college life.

Emphasis is on building academic oral and written communication skills. Students will learn through interactive classroom and community-based activities.

#### **PROGRAM OUTCOMES**

1. Critically read and analyze a variety of academic texts from a range of subjects at the level required for postsecondary studies.

2. Communicate competently, showing flexibility and clarity of thought and expression.

3. Conduct research and write essays to ensure success in post-secondary studies

4. Develop a sense of personal and social responsibility through the examination and evaluation of various aspects of our changing society.

5. Develop and apply skills and strategies to ensure academic success in post-secondary studies.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma (OSSD) or equivalent; or Mature Student status

Applicants, whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.

Sault College English proficiency requirements for this entry-level bridging program: IELTS Academic - 4.5, no band lower than 4.0

## **CAREER PATHS**

The program's focus on English for Academic Purpose allows students to pursue further study in any

vocational field, which will lead to employment.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
N/A	N/A	N/A	N/A

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **EDUCATIONAL PATHS**

This is a bridging program to further study. This program will provide academic support to ensure student readiness for post-secondary programs. Once students are engaged in learning and expectations of College curriculum, they can move on to post-secondary programs of their choosing.

## **OTHER INFORMATION**

Note: The first delivery of this program is scheduled for January 2021. Please contact Sault College regarding the possibility of program entrance with advanced standing.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

EAP100-3 Academic Reading - IELTS Level 4 EAP101-3 Academic Writing - IELTS Level 4 EAP102-3 Academic Listening and Speaking - IELTS Level 4 EAP103-2 Enhanced Reading and Writing - IELTS Level 4 EAP104-2 Academic Reading - IELTS Level 5 EAP105-3 Academic Writing - IELTS Level 5 EAP200-3 Academic Listening and Speaking - IELTS Level 5 EAP201-3 Enhanced Reading and Writing - IELTS Level 5 EAP202-2 Academic Reading - IELTS Level 6 EAP203-3 Academic Writing - IELTS Level 6 EAP204-3 Academic Listening and Speaking - IELTS Level 6 EAP205-3 Enhanced Integrated Skills - IELTS Level 6 GAS120-3 Canada Eh! HDG122-3 Personal and Academic Success Strategies

## **Course Descriptions**

#### Semester 1

#### Academic Reading - IELTS Level 4 (EAP100) (3 credits)

Strong reading skills are necessary for academic and workplace success. Students increase reading speed and comprehension while using skills and strategies to understand adapted and authentic passages on a wide variety of topics. Through intensive and extensive reading assignments, students summarize and respond to texts, with an emphasis on accuracy and clarity.

### Academic Writing - IELTS Level 4 (EAP101) (3 credits)

Clear and accurate writing is required in academic and workplace environments. Extensive feedback received from instructors is used by students to enhance their writing skills and complete a wide range of assignments. Exploration of sentence structure and grammar enables students to produce simple, compound and complex sentences. Students practice brainstorming and planning methods to produce clear, well-organized writing.

## Academic Listening and Speaking - IELTS Level 4 (EAP102) (3 credits)

The ability to understand oral speech and to express oneself accurately and fluently are the keys to successful communication in social, academic and workplace environments. For natural and clear oral expression, students apply grammatical structures and fluency strategies. Students build confidence in speaking to peers through academic discussions and short presentations. Using listening strategies, students record information accurately, identify patterns of organization and give personal reflections on a topic.

## Enhanced Reading and Writing - IELTS Level 4 (EAP103) (2 credits)

Mid-intermediate students need to reinforce the reading and writing skills they have acquired. Through a variety of integrated tasks, students improve the efficiency and accuracy of their comprehension and production of passages of moderate length. Focus is on further developing and applying reading strategies, practicing extensive reading and improving the quality of writing in paragraph and multiple paragraph form.

## Academic Reading - IELTS Level 5 (EAP104) (2 credits)

Reading skills are essential for success in academic and workplace environments. Students build on and apply reading skills and strategies to increase comprehension, fluency and vocabulary. Students read both adapted and authentic passages on a wide range of topics and summarize and respond to the texts, with a focus on accurate content and clear expression.

## Academic Writing - IELTS Level 5 (EAP105) (3 credits)

Clear and accurate writing is required in academic and workplace environments. Students learn structures and grammar to produce complex sentences that fulfill a range of communicative functions. Students apply writing process techniques to perform a variety of written communication tasks. Using extensive feedback from instructors, students systematically apply proofreading and editing skills to locate and correct common writing errors and improve written work.

## Academic Listening and Speaking - IELTS Level 5 (EAP200) (3 credits)

Listening comprehension skills as well as clear and accurate self-expression are essential for effective communication in social, academic and workplace settings. Students identify key information and patterns of organization in a variety of adapted and authentic listening texts. Students use pre-listening and note-taking strategies to create outlines and spoken or written responses to listening passages. Through small group and presentation activities on a wide range of academic subjects, students continue to build accuracy and fluency.

## Enhanced Reading and Writing - IELTS Level 5 (EAP201) (3 credits)

High-intermediate students need to reinforce their reading and writing skills. Students increase their reading proficiency through the use of strategies and extensive reading. Focus is on improving the quality of writing skills at both the paragraph and the short essay level.

## Academic Reading - IELTS Level 6 (EAP202) (2 credits)

Reading skills are essential for success in academic and workplace environments. Students increase reading comprehension, fluency and vocabulary by building on and applying reading skills and strategies. Through intensive and extensive reading assignments, students read both authentic and adapted passages in a variety of subject areas and summarize and respond to the passages, with an emphasis on accuracy and clarity.

### Academic Writing - IELTS Level 6 (EAP203) (3 credits)

Clear and accurate writing is required in academic and workplace environments. Students use appropriate structures and grammar to produce complex sentences that fulfill a range of communicative functions. Students apply writing process techniques to perform a variety of written communication tasks. Using extensive feedback from instructors, students systematically apply proofreading and editing skills to locate and correct common writing errors and improve written work.

## Academic Listening and Speaking - IELTS Level 6 (EAP204) (3 credits)

Listening comprehension skills as well as clear and accurate self-expression are essential for effective communication in social, academic and workplace settings. Students practice accuracy and fluency through group activities on a variety of academic subjects. Students use listening strategies to create outlines and spoken or written responses to adapted and authentic listening passages.

## Enhanced Integrated Skills - IELTS Level 6 (EAP205) (3 credits)

Students familiarize themselves with the format of the IELTS test and the types of questions included on the test. In addition, students work on developing the reading comprehension, academic writing, listening and speaking skills necessary for success on the IELTS test and in academic English at the postsecondary level.

## Canada Eh! (GAS120) (3 credits)

What does it mean to be Canadian? This course will examine the people of Canada and aspects of life, such as food, music, television, art, language, etc. By examining our diversity, we will come to understand that there is more than one Canadian identity.

## Personal and Academic Success Strategies (HDG122) (3 credits)

This course will prepare you for the rigors of academic life and enable you to develop a personal profile for college and career success. The main focus of this course will include accepting personal responsibility, discovering self-motivation, mastering self-management, employing interdependence, gaining self-awareness, adopting lifelong learning, and developing emotional intelligence. In addition, you will develop and produce a `Personal Profile` that will identify your personal learning style, communication style, and personality style to enable you to achieve success in learning about, understanding, and choosing the courses and careers that will lead to personal and professional satisfaction.

## General Arts and Science - Kitchen Assistant

Section B.94 6/2/2020

**Ontario College Certificate (1 Year - 2 Semesters ) (1075)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Kitchen Assistant program prepares you for entry level positions within the food service industry. This program is also designed for students wishing to advance to the Culinary Skills Chef Training program, but who may need some academic upgrading. The program includes food theory classes, explores kitchen operations and allows for hands on preparation of a variety of recipes. You will prepare food and practice customer service skills while on your work placement, in the Colleges Gourmet to Go.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C, or mature student status. Students completing courses at the workplace level may be considered.

## **CAREER PATHS**

Graduates may find excellent opportunities for employment in hotel kitchens, restaurants, institutions, and catering organizations. Students who successfully complete this program will be given direct entry into the Culinary Skills - Chef Training program.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
N/A	N/A	N/A	N/A

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **DRESS CODE**

#### **Requirements in Labs:**

- 1. Clean uniform required daily purchase three complete sets of uniforms (coat, checkered pants, necktie, apron & chef's hat)
- 2. Side towels (4) to be purchased
- 3. Black non-slip shoes
- 4. Assigned Knife Kit

In order to abide by the Provincial Health Regulations, all students must have their hair controlled above the collar and hairnet must be used while in the food preparation areas. Students must be clean-shaven. Beards and/or moustaches may be permitted if they are trimmed and neatly maintained at the criteria of the Hospitality Department and health regulations regarding hair control.

## **CLINICAL/LAB OR FIELD PLACEMENTS**

Students gain valuable experience through participation in special events put on by the College and local industry. Students also participate in a two semester work placement within the college at Gourmet to Go.

## **OTHER INFORMATION**

This program will not be offered in the 2020 / 2021 Academic Calendar Year.

For more information contact Program Coordinator Sarah Birkenhauer at 705.759.2554 ext 2588 or email <u>sarah.birkenhauer@saultcollege.ca</u>.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

KAS100-KAS101-KAS102-KAS103-KAS104-KAS105-

### SEMESTER 2

KAS200-KAS201-KAS202-

## **Course Descriptions**

#### Semester 1

(KAS100) ( credits)

- (KAS101) ( credits)
- (KAS102) ( credits)
- (KAS103) ( credits)
- (KAS104) ( credits)

(KAS105) ( credits)

#### Semester 2

(KAS200) ( credits)

(KAS201) ( credits)

(KAS202) ( credits)

## General Arts and Science - One-Year

Section B.95 6/2/2020



Ontario College Certificate (1 Year - 2 Semesters ) (1105) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

Are you unsure of what to study at the post-secondary level? This program is designed to help you choose the path that is right for you. You will gain a strong foundation in academic skills and you will have the opportunity to choose from a wide variety of courses in communications, social sciences, humanities, and math and science. With the assistance of the General Arts and Science staff and faculty, you will choose electives to create an individualized timetable.

## Pathways

After completion of this program, you may choose to follow one of these pathways:

- Continue in the second year of the General Arts and Science UniversityTransfer diploma program
- Continue study in another Sault College diploma program
- Apply to an Ontario university for admission

Applicable credits earned in the General Arts and Science Certificate program will count towards completion of other Ontario college diploma programs offered at Sault College.

Once you have successfully completed two semesters of full-time studies (minimum of 36 credits) you will be awarded a General Arts and Science One Year Certificate.

Full-time students successfully completing two semesters of the General Arts and Science - One-Year Certificate option, provided they meet the specific program entrance requirements, will be guaranteed a position in the first year of the postsecondary program of their choice, with the exception of limited enrolment programs. Limited enrolment programs will guarantee 10 percent of their seats for full-time students successfully completing the General Arts and Science - One-Year Certificate program and meeting other entrance criteria.

#### **PROGRAM OUTCOMES**

## A graduate of the Sault College General Arts and Sciences One Year Program will reliably demonstrate the ability to:

- 1. Develop, through general knowledge gained in a wide range of subjects, insight into both self and society.
- 2. Develop flexibility and clarity of both thought and expression in order to develop communications competence to a level required by business and industry.
- 3. Understand and utilize critical thinking processes and problem solving techniques.
- 4. Examine and evaluate various aspects of our changing society to assist in developing a sense of personal and social responsibility as a citizen in society.
- 5. Employ basic vocational, skills drawn from the areas of the Humanities, Social and Behavioural Sciences of Vocational Studies (Business, Technology).

#### Reference

Ministry of Training, Colleges and Universities, General Arts and Sciences Program Description (MTCU

44700)

#### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

#### **OTHER INFORMATION**

September and January Intakes are available for this program. Please contact the Registrar's Office for further information.

For More Information Contact:Program Coordinator, Silvana Turpin at 705-759-2554 ext 2670 or by email at silvana.turpin@saultcollege.ca.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM110-3 College Communication Skills GEN100-3 Global Citizenship PSY102-3 Introduction to Psychology Electives:

In addition to the three mandatory courses, based on individual goals and academic interests, you will choose a minimum of three electives to complete your timetable for Semester 1. If you are interested in part-time studies, this option is available to you.

#### **General Arts and Science - One-Year Transfer Policy**

You may be eligible to transfer to the General Arts and Science - One-Year option from other postsecondary programs in either the fall or winter semester.

Full-time students successfully completing two semesters of the General Arts and Science - One-Year option, provided they meet the specific program entrance requirements, will be guaranteed a position in the first year of the postsecondary program of their choice, with the exception of limited enrolment programs.

Limited enrolment programs will guarantee 10 percent of their seats for full-time students successfully completing the General Arts and Science - One-Year program and meeting other entrance criteria.

The basis for selection is as follows:

- Should the number of students exceed the number of allotted seats (10 percent), then students will be ranked according to their grade point average (GPA).
- The qualified candidates who are not successful in either of the above circumstances will still be eligible to apply to the limited enrolment program by meeting the regular College-wide criteria.
- The General Arts and Science One-Year Ontario College Certificate provides exploration opportunities in other programs offered at Sault College. Some students may be eligible to access a limited number of College programs that offer a January intake. You may otherwise decide to enter a postsecondary program in September.

#### **SEMESTER 2**

GAS106-3 Communication: Theory and Practice HST105-3 History of Western Civilization - Part One Electives:

In addition to the two mandatory courses, based on individual goals and academic interests, you will choose a minimum of four electives to complete your timetable for semester 2.

#### **Course Descriptions**

#### Semester 1

#### College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Introduction to Psychology (PSY102) (3 credits)

A study of the science of psychology; its methods, concepts and theories, including the following topic areas: (1) biological bases of behaviour and perceptual processes; (2) intelligence, learning and memory; (3) motivation and emotion, and (4) states of awareness. Psychological concepts will be studied with a view towards how they can be applied to enhance the student's understanding of psychological adaptation and the cases and consequences of human behaviour.

#### Semester 2

#### Communication: Theory and Practice (GAS106) (3 credits)

This course provides the foundations of effective human communication. It focuses on three specific areas of competence: small group competence, interpersonal communication, and public speaking. Each of these areas is reinforced through a variety of learning methods and media: lectures, group discussions, group projects, readings, film analysis, and reflective learning portfolio.

#### History of Western Civilization - Part One (HST105) (3 credits)

This course will introduce the student to the ancient world of the past. We will examine the ages from pre-historic times to the first civilizations: from the first great empires, through the middle ages, to the age of enlightenment. The student is introduced to the histories of ideas, politics, economics, religion, and society as well as other disciplines, thus enabling him/her to link these worlds with this one, thereby leading to a more complete understanding of the human experience.

## General Arts and Science - University Transfer

Section B.96 6/2/2020

**Ontario College Diploma (2 Years- 4 Semesters ) (1115)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



#### **PROGRAM OVERVIEW**

Are you interested in progressing to university? The General Arts and Science UniversityTransfer diploma gives you the opportunity to explore a wide variety of subject areas such as communications, social sciences, humanities, the arts or math and science at a postsecondary level, and discover what it is that interests you. The UniversityTransfer diploma program also provides you with an excellent foundation for a university education, another diploma program or a career that requires wide-ranging and flexible, transferable skills, which meet the needs of many employers. This program can be taken full or part time allowing you flexibility in your studies.

Credit transfer opportunities are available to various universities.

#### **Degree Possibilities:**

Many university pathways are available to graduates of the General Arts and Science UniversityTransfer diploma. For a listing of the university pathways available to you, please click the following <u>link</u>.

#### **PROGRAM OUTCOMES**

## A graduate of the Sault College General Arts and Science - UniversityTransfer Program will reliably demonstrate the ability to:

- 1. Develop, through general knowledge gained in a wide range of subjects, insight into both self and society.
- 2. Develop flexibility and clarity of both thought and expression in order to develop communications competence to a level required by business and industry.
- 3. Understand and utilize critical thinking processes and problem solving techniques.
- 4. Examine and evaluate various aspects of our changing society to assist in developing a sense of personal and social responsibility as a citizen in society.
- 5. Employ basic vocational, skills drawn from the areas of the Humanities, Social and Behavioural Sciences of Vocational Studies (Business, Technology).

#### **Reference**

Ministry of Training, Colleges and Universities, General Arts and Sciences Program Description (MTCU 54701)

#### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C, or mature student status.

#### **CAREER PATHS**

Current trends indicate that the average person will change careers several times during a lifetime. In University Transfer, you will learn many skills that are transferable to the workplace. Employers are seeking people with good communication, thinking, and interpersonal skills who can pick up more specific business or technical skills via on-the-job training. This option is also an ideal program for you if you want to prepare for further education at university level. Some degree granting colleges and universities accept transfer credits from the Sault College, General Arts and Science - UniversityTransfer Diploma option. See pathways for information on university pathways available to you.

#### MANDATORY FEES

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

#### **OTHER INFORMATION**

#### **Important Note:**

This is the new program name and number effective September 2015. This program was formerly called General Arts and Science - Liberal Studies, program #1100.

For more information contact: Program Coordinator Silvana Turpin at 705.759.2554 Ext 2670 or by email at: <u>silvana.turpin@saultcollege.ca</u>.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM110-3 College Communication Skills PSY102-3 Introduction to Psychology GEN100-3 Global Citizenship Note: In Semester 1, in addition to the three mandatory courses, students must also choose three elective courses.

#### **SEMESTER 2**

GAS106-3 Communication: Theory and Practice HST105-3 History of Western Civilization - Part One Note:

\*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

In Semester 2, in addition to the two mandatory courses and choice of one Student Selected General Education course, students must also choose three elective courses.

#### **SEMESTER 3**

GAS100-3 Film Studies SOC120-3 Introductory Sociology LIB210-3 The Great Thinkers (Introduction to Philosophy) Note: In Semester 3, in addition to the three mandatory courses, students must also choose one language elective and two elective courses.

#### **SEMESTER 4**

ENG218-3 Introduction to Literature ENG315-3 Ideas, Issues and Persuasion HDG107-3 Cross Cultural Issues MTH121-5 Algebra POL105-3 Political Science: A Canadian Perspective Note: In Semester 4, in addition to the 5 mandatory courses, students must also choose one elective course.

#### **Course Descriptions**

#### Semester 1

#### College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Introduction to Psychology (PSY102) (3 credits)

A study of the science of psychology; its methods, concepts and theories, including the following topic areas: (1) biological bases of behaviour and perceptual processes; (2) intelligence, learning and memory; (3) motivation and emotion, and (4) states of awareness. Psychological concepts will be studied with a view towards how they can be applied to enhance the student's understanding of psychological adaptation and the cases and consequences of human behaviour.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 2

#### Communication: Theory and Practice (GAS106) (3 credits)

This course provides the foundations of effective human communication. It focuses on three specific areas of competence: small group competence, interpersonal communication, and public speaking. Each of these areas is reinforced through a variety of learning methods and media: lectures, group discussions, group projects, readings, film analysis, and reflective learning portfolio.

#### History of Western Civilization - Part One (HST105) (3 credits)

This course will introduce the student to the ancient world of the past. We will examine the ages from pre-historic times to the first civilizations: from the first great empires, through the middle ages, to the age of enlightenment. The student is introduced to the histories of ideas, politics, economics, religion, and society as well as other disciplines, thus enabling him/her to link these worlds with this one, thereby leading to a more complete understanding of the human experience.

#### Semester 3

#### Film Studies (GAS100) (3 credits)

This film studies course is an opportunity to gain awareness and appreciation of artistic expressions through films. A major emphasis will be placed on exposure to and guided discussions of a wide range of exciting productions including short films, feature films and documentaries from different parts of the world. While exploring the relevance and impact of film to address controversial contemporary issues, this course will offer learning activities to gain expertise in reflecting critically and writing about the state of our modern world.

#### Introductory Sociology (SOC120) (3 credits)

This course is designed to provide students with the means to achieve a sociological orientation

or perspective for analysis of social events. The basis of sociology, i.e. its approaches to the

study of society, community, and social change is presented.

#### The Great Thinkers (Introduction to Philosophy) (LIB210) (3 credits)

The focus is upon wisdom as it has been put forward by key philosophers from western and eastern backgrounds. While exploring the philosophies of many `key` figures, students will examine their relevance to current issues and dilemmas.

#### Semester 4

#### Introduction to Literature (ENG218) (3 credits)

This course is designed to introduce the various genres of literature - novel, poetry, drama and essay - and to explore their development through a historical perspective.

#### Ideas, Issues and Persuasion (ENG315) (3 credits)

This course helps students to become effective communicators in society. It examines elements of critical thinking necessary for the successful exchange of information. Students will respond to positions presented in scenarios, case studies or current affairs that they are likely to encounter. They will be challenged to identify problems and generate solutions supported by logical arguments. Emphasis will be placed on independent learning skills needed to adapt to a changing environment and on persuasive communication of ideas in order to facilitate creative problem solving for a variety of life situations. In this course, the principles of writing are taught through the writing process.

#### Cross Cultural Issues (HDG107) (3 credits)

This course is an introduction into multi-culturalism and its effects on us as citizens of Canada and the world. Emphasis will be placed on the discovery and investigation of issues related to the concept of cross-cultural interaction. The primary goal is to expand the students' understanding of the importance of our movement towards globalism.

#### Algebra (MTH121) (5 credits)

In this introductory algebra course students will learn concepts and skills leading to applications. For those planning to enter programs that require technical math, this course establishes a solid foundation. This course is also well suited to those who are entering fields of study where math is not a required

component of the curriculum but a working knowledge of algebra is expected. Topics of study include: polynomials, factoring, graphing, solving linear equations and systems, exponents and radicals, and quadratic equations.

#### Political Science: A Canadian Perspective (POL105) (3 credits)

The aim of this course is to introduce the student to the world of politics. Students will acquire a basic understanding of political behaviours, from its earliest beginnings to its present forms. We will examine the various structures of government in today's world, and Canada's in particular. Branches of government, political ideologies, constitutional government, the role of political parties, and electoral systems will all be examined with a view to enhancing our political awareness.

# Collaborative Bachelor of Science in Nursing

Section B.97 6/2/2020

Degree (4 Years - 8 Semesters ) (3400)

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## 

#### **PROGRAM OVERVIEW**

Sault College, in collaboration with Laurentian University, offers a complete BScN program on site in Sault Ste Marie, Ontario. Laurentian University is the degree granting institution and the program is accredited by the Canadian Association of Schools of Nursing. Graduates are eligible to write the provincial registration examinations to become a Registered Nurse with the College of Nurses of Ontario, subject to their fees and requirements. For more information, contact the College of Nurses of Ontario. http://www.cno.org/en/become-a-nurse/

The nursing curriculum stresses health promotion and wellness, while at the same time continuing to focus on care for ill persons. The curriculum, based on a Nursing Approach to Caring will prepare practitioners for the next 20 years. Students will be actively involved in their own learning, designing and engaging in learning activities that will enhance learning of the concepts basic to nursing. Together, the students and faculty will explore the knowledge of nursing and caring. Students will practice nursing within a variety of settings and contexts and with a diverse client population.

#### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Admission requirements:

Ontario Secondary School diploma (OSSD) with a minimum average of 75% including:

- One 4U English
- One 4U Biology
- One 4U Chemistry
- One 4U Mathematics
- Two other 4U/M courses
- **OR** successful completion of the Pre-Health Sciences- Pathways to Advanced Diplomas & Degrees Program (3065) with a minimum 3.0 GPA

Mature students are advised to contact the Registrar's Office for further information regarding admission.

This is typically a high demand program thus meeting the minimum prerequisite average or completing Pre-Health Sciences with the minimum GPA does not guarantee an offer of admission.

Applicants will be ranked based on the average of the required courses.

NOTE: Applicants and students in the Collaborative Bachelor of Science in Nursing program are required to disclose all education, which requires submission of all prior educational transcripts from high school and post-secondary studies. Failure to fully disclose your educational documents could be grounds for dismissal from the program.

#### **CAREER PATHS**

You will be prepared for nursing in traditional settings: community, private practice, acute and chronic care hospitals and settings yet to be realized. Over the next ten years there is an expected shortage of nurses provincially, nationally and internationally. Once you graduate, you may choose to specialize in an area of nursing practice or continue on with your studies at the graduate and post graduate levels. Sault College/Laurentian University graduates will be prepared to create and influence the future of nursing practice at a political, social and professional level by responding to and anticipating the changing health care needs of society.

In Ontario, the Regulated Health Professional Act (RHPA) and the Nursing Act have conditions for provincial registration that impact Ontario students entering and completing the Nursing program and writing the National Council Licensure Examination - Registered Nurses (NCLEX-RN)required for licencing. These conditions are required to protect public interest.

When applying for provincial registration with the College of Nurses of Ontario, information must be provided about citizenship, previous incidence of criminal offences, professional misconduct, and incompetence or incapacity in another health profession in Ontario, or in nursing in another jurisdiction. Applicants must also provide information about any physical and/or mental disorders that make it desirable, in the public interest, that the person not practice.

This new legislation for all individuals requesting registration should be reviewed by students applying to the Nursing program. For information on the implications of this new legislation, call the College of Nurses of Ontario at 1-800-387-5526 or view their web site, <u>http://www.cno.org/en/become-a-nurse/</u>

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$6,037.20	\$1,127.00	N/A	N/A

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

#### **DRESS CODE**

#### Lab, Clinical and Community Dress Policies

Identification Pin (name tag) is worn in all hospital and community clinical experiences, as well as for formal presentations.

Nursing Lab Classes/Data Collection: Students wear a royal blue polo shirt with the BScN logo and professional pants in a neutral color.

Community Placements: Students wear professional dress. Depending on the location; students may choose their BScN royal blue polo shirt and professional pants in a neutral color.

Hospitals/Nursing Homes: Royal Blue Uniform with Sault College Collaborative BScN Program logo. Warm-Up Jacket, is to be black with the Sault College Collaborative BScN logo.

Note: Uniforms with the BScN logo are available for purchase in the College Bookstore.

Shoes: predominantly white with closed toe and heel; designated for clinical practice.

Jewellery: small studs, watch with a seconds hand.

Hair: off collar and face. Lengthy braids and ponytails must be secured up above the collar. Facial hair, if present, must be neatly groomed.

Nails: appropriately cut, no polish including clear; false nails not permitted.

Body adornment is to be consistent with clinical agency policy.

Fragrance free products are required. Attention to personal hygiene is expected.

#### **CLINICAL/LAB OR FIELD PLACEMENTS**

Students are responsible for ensuring that they meet the clinical and field placement requirements for their program. They are expected to keep all placement documentation up-to-date and accessible so that it can be presented to teachers/placement agencies at any time. Once these documents have been reviewed they are returned to the student. The college does not keep copies on file. The full cost associated with obtaining placement requirements is the responsibility of the student. Tuition will not be refunded if access to placement/clinical is denied or if proof of requirements is not submitted within stated time frames.

#### Required

Standard 1st Aid Certificate

CPR (Health Care Provider or Basic Life Support Level) Certificate - (yearly recertification required)

WHMIS Certificate (current within one year)

N95 Mask Fit Testing Card (renew every 2 years). Successful mask fit testing requires a clean shaven face (minimal facial hair) to administer the test.

#### **Immunization and Health Record Documents**

A complete College Health Form along with official immunization documentation must be submitted it to the College Health Centre. Contact your health care provider, medical clinic or in Sault Ste. Marie and District, Algoma Public Health if you need to update your immunization record. (Fees may apply for immunization services.)

#### **Required:**

- proof of a 2-step Mantoux test or 1-step serum test for tuberculosis. For known positives, a chest x-ray is required. (BScN students require annual 1-step TB testing after a 2-step has been completed.)
- proof of measles, mumps and rubella immunization
- proof of tetanus/diphtheria immunization
- proof of chicken pox immunization or immunity
- proof of Hepatitis B vaccine series or Twinrix series (either one is acceptable)
- Influenza immunization each November of the program. The flu vaccine is not mandatory however in the event that a student refuses the vaccine, the student must follow placement agency policies.

This may mean removal from clinical placement for the duration of an influenza outbreak. The vaccine takes two weeks to come into effect and therefore students who do not get it by the established deadline may be removed from clinical. Students can contact their coordinator if they have any questions.

#### Deadlines for submission of the above-noted requirements are as follows:

- Year 1, Semester 1: Day 10 of the Fall semester (all requirements except for the influenza vaccine must be submitted, or student will be required to withdraw from the clinical course)
- Years 2, 3 & 4: All requirements must be submitted by Day 1 of the Fall semester or the semester which they are re-entering the program.

#### **Criminal Record Check with Vulnerable Sector Search**

This document is mandatory for agencies to grant unsupervised access to vulnerable persons. Students will be given detailed information about obtaining a current Criminal Record Check during the first month of classes or when clinical/field placements are confirmed. (Note: If a criminal record exists or charges are pending, you are required to disclose this information to the Chair of Health Programs before the start of your program).

Criminal Record Check with Vulnerable Sector Search is a yearly requirement that must be?updated annually.

All costs associated with placement requirements listed above are the responsibility of the student.

Students must also sign a Statement of Confidentiality.

For further information regarding clinical and field placement requirements for this program, please contact Lori Zuccato either by email: <u>lori.zuccato@saultcollege.ca</u> or by phone: 705-759-2554 ext. 2693.

#### **OTHER INFORMATION**

For more information contact Program Coordinator Lori Matthews at 705.759.2554, ext 2454 or email lori.matthews@saultcollege.ca.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

BIOL2105-6 Human Anatomy and Physiology Note: (BIOL2105-6 is a one-year course that is taught in semesters 1 and 2) BSCN1004-4 Nursing Praxis and Professional Caring I BSCN1056-3 Professional Growth I BSCN1206-3 Relational Practice I

#### SEMESTER 2

BSCN1007-3 Health and Healing I BSCN1094-4 Nursing Praxis and Professional Caring II BSCN1207-3 Relational Practice II

#### **SEMESTER 3**

BIOL2036-3 Microbiology for the Health Sciences BSCN2006-3 Health and Healing II BSCN2084-4 Nursing Praxis and Professional Caring III CHMI2220-6 Clinical Chemistry Note: (CHMI2220-6 is a one-year course that is taught in semesters 3 and 4)

#### **SEMESTER 4**

BSCN2057-3 Professional Growth II BSCN2107-3 Health and Healing III BSCN2144-7 Nursing Praxis and Professional Caring IV

#### **SEMESTER 5**

BSCN3005-6 Health and Healing IV Note: (BSCN3005-6 is a one-year course that is taught in semesters 5 and 6) BSCN3056-3 Professional Growth III BSCN3084-4 Nursing Praxis and Professional Caring V BSCN3206-3 Relational Practice III BSCN3406-3 Nursing Inquiry and Praxis I

#### **SEMESTER 6**

BSCN3066-3 Professional Growth IV BSCN3094-4 Nursing Praxis and Professional Caring VI BSCN3416-3 Nursing Inquiry and Praxis II

#### **SEMESTER 7**

BSCN4084-4 Nursing Praxis and Professional Caring VII BSCN4156-3 Professional Growth V BSCN4206-3 Relational Practice IV BSCN4416-3 Nursing Inquiry and Praxis III

#### **SEMESTER 8**

BSCN4094-9 Nursing Praxis and Professional Caring VIII BSCN4157-3 Professional Growth VI

#### **PROGRAM OF STUDY NOTES**

Electives:

Note:

A minimum of 60% is required in all nursing (BSCN) and Science (BIOL2105, BIOL2036 and CHMI2220) courses to graduate.

#### **Electives:**

Electives must add up to 15 credits. A minimum of 50% is required in all elective courses in order to graduate.

\*A listing of electives will posted on the student portal prior to semesters 1, 2, 3, 6 and 7. All electives are subject to availability. Once registration opens, please choose your elective on the student portal.

#### **Course Descriptions**

#### Semester 1

Human Anatomy and Physiology (BIOL2105) (6 credits)

This course describes human anatomy and physiology at the cellular, tissue, organ, and system levels of organization. Aspects of this course will concentrate on the clinical application of anatomy and physiology. Credit cannot be retrained for both BIOL2105 and any of BIOL1700, 2107, 2701, PHED1506, 1507, 2106. (class 3, lab 3) cr 6

#### Nursing Praxis and Professional Caring I (BSCN1004) (4 credits)

This course introduces the concept of health in nursing. Opportunities are provided to apply the nursing process in multiple educational contexts with an emphasis on safe and ethical care with older adults and families. Learners are required to integrate concurrent learning. (lec/sem 3, lab 3, 34 hr exp) cr 4

#### Professional Growth I (BSCN1056) (3 credits)

This course focuses on an introduction to the profession of nursing. Opportunities are provided for learners to explore the evolution of nursing and professional standards within a Canadian context. Nursing knowledge is introduced in terms of relationships between theory, practice, and research. Learners are required to integrate concurrent learning. (lec/sem 3) cr 3

#### Relational Practice I (BSCN1206) (3 credits)

This course focuses on the learners discovery of self as nurse and self in relation to others. Opportunities are provided to engage in structured reflection guided by the literature and interaction with others. Emphasis is placed on understanding how select concepts relate to and impact on experiences with self and others. Learners are required to integrate concurrent learning. (lec/sem 3) cr 3

#### Semester 2

#### Health and Healing I (BSCN1007) (3 credits)

This course focuses on developing an understanding of family experiences with chronic health challenges. Opportunities are provided for learners to explore literature related to models of family assessment and chronicity as well as concepts relevant to health and healing. Learners are required to integrate new and prior learning. (lec/sem 3, 10 hr. exp) cr 3

#### Nursing Praxis and Professional Caring II (BSCN1094) (4 credits)

This course focuses on health assessment of individuals across the lifespan with an emphasis on well adults. Opportunities are provided to apply the nursing process and demonstrate clinical decision-making within a practice setting. Learners are required to integrate new and prior learning. (lec/sem 3, lab 3, 88 hr exp) cr 4

#### Relational Practice II (BSCN1207) (3 credits)

This course introduces therapeutic use of knowledge and skills in relation to others in the context of professional relationships. Opportunities are provided to develop beginning competencies in the establishment of respectful and safe engagement for client-centred care. Learners are required to integrate new and prior learning. Learners are required to integrate new and prior learning. (lec/sem 3) cr 3

#### Semester 3

#### Microbiology for the Health Sciences (BIOL2036) (3 credits)

This course covers the basics of microbial cell structure and function, antimicrobial therapy and drug resistance, the immune system, antibodies, and diagnostic microbiology. The course also examines the involvement of microbes in emerging and re-emerging infectious diseases as well as nosocomial and

sexually transmitted infections. PREREQUISITES: BIOL 1506, or 12U Biology, or permission of the instructor. Not available to students in the Biology program. May not be combined with BIOL 2026 for credit. (lec 3, lab 3) cr 3.

#### Health and Healing II (BSCN2006) (3 credits)

This course focuses on the nurses role in meeting the health care needs of generative families. Opportunities are provided to develop an understanding of human growth and development and nursing care of the perinatal, newborn, and pediatric client. Learners are required to integrate new and prior learning. (lec/sem 3, 10 hr exp) cr 3

#### Nursing Praxis and Professional Caring III (BSCN2084) (4 credits)

This course focuses on the application of integrated pharmacological knowledge and interventions within nursing process. Opportunities are provided to develop caring practice with patients experiencing health challenges. Learners are required to integrate new and prior learning. (lec/sem 3, lab 3, 108 hr exp) cr 4

#### Clinical Chemistry (CHMI2220) (6 credits)

A course designed for students in nursing to provide an understanding of the relationship between disease, the underlying biochemical causes and the methodology for diagnosis. (class 3; lab 3) cr. 6

#### Semester 4

#### Professional Growth II (BSCN2057) (3 credits)

This course focuses on complex issues inherent in the delivery of nursing care from a Canadian perspective. Opportunities are provided for learners to examine moral, professional, ethical, and legal nursing knowledge in relation to current practice. Learners are required to integrate new and prior learning. (lec/sem 3) cr 3

#### Health and Healing III (BSCN2107) (3 credits)

This course focuses on human pathophysiology. Opportunities are provided to translate knowledge of such science to inform nursing practice. Learners are required to integrate new and prior learning. (lec/sem 3) cr 3

#### Nursing Praxis and Professional Caring IV (BSCN2144) (7 credits)

This course focuses on experiences with healing in relation to complex health challenges. Opportunities are provided to apply the nursing process, demonstrate pattern recognition, increase self-directedness, and participate in delivery of comprehensive care of patients. Learners are required to integrate new and prior learning. (lec/sem 6; lab 3; 108 hr exp) cr 7

#### Semester 5

#### Health and Healing IV (BSCN3005) (6 credits)

This course focuses on concepts, principles, frameworks and standards of practice relevant to the community health nursing context in Canada. Opportunities are provided to engage in community health assessment and program planning with emphasis on health promotion. Learners are required to integrate new and prior learning. (lec/sem 3) cr 6

#### Professional Growth III (BSCN3056) (3 credits)

This course focuses on the examination of teaching and learning theory and methods. Through critical reflection, learners explore current evidence, beliefs, and values as they apply the teaching and learning

process. Opportunities are provided to experience teaching and learning in the context of health promotion and protection. Learners are required to integrate new and prior learning. (lec/ sem/CST 3) cr3

#### Nursing Praxis and Professional Caring V (BSCN3084) (4 credits)

This course focuses on health promotion and protection within the context of physiological, psychological, psychosexual, emotional, social, cultural, and spiritual health. Opportunities are provided to explore health and healing in relation to health-care delivery. Learners are required to integrate new and prior learning. (lec/sem 3, lab .5, 96 hr acute exp, 72 hr community exp) cr 4

#### Relational Practice III (BSCN3206) (3 credits)

This course advances the development of empirical, theoretical, and experiential relational praxis. Opportunities are provided to demonstrate advanced relational competencies to establish, maintain and bring closure to professional relationships in challenging circumstances. Learners are required to integrate new and prior learning. (lec/sem 3) cr 3

#### Nursing Inquiry and Praxis I (BSCN3406) (3 credits)

This course focuses on the introduction of the foundations of nursing knowledge including philosophical, theoretical, and scientific underpinnings. Opportunities are provided to describe inter-relationships between theory and research grounded in clinical practice. Learning experiences require integration of new and prior learning. (lec/sem 3) cr 3

#### Semester 6

#### Professional Growth IV (BSCN3066) (3 credits)

This course focuses on the social construction of health inequities. Opportunities are provided to critically examine health outcomes of power inequities at the level of the individual, family, community, and professionally. Learners are required to integrate new and prior learning. (lec/sem 3) cr. 3

#### Nursing Praxis and Professional Caring VI (BSCN3094) (4 credits)

This course focuses on health promotion and health protection within the context of diverse aggregates. Opportunities are provided to further explore health and healing in relation to health-care delivery. Learners are required to integrate new and prior learning. (lec/sem 3, lab .5, 96 hr acute exp, 72 hr community exp) cr 4

#### Nursing Inquiry and Praxis II (BSCN3416) (3 credits)

This course focuses on traditions of quantitative and qualitative nursing inquiry. Opportunities are provided to initiate nursing research praxis through the critical appraisal of published evidence. Learners are required to integrate new and prior learning. (lec/sem 3) cr 3

#### Semester 7

#### Nursing Praxis and Professional Caring VII (BSCN4084) (4 credits)

This course focuses on critical examination of nursing knowledge related to complex health challenges. Opportunities are provided to identify, appraise, and integrate relevant nursing knowledge to understand praxis. Learning experiences require the integration of new and prior learning. (lec/sem 3, lab 1, 200 hr exp) cr 4

#### Professional Growth V (BSCN4156) (3 credits)

This course focuses on the critical examination of complex nursing practice issues. Opportunities are provided for learners to reflect upon their development as novice practitioners informed by evidence and standards of practice. Learners are required to integrate new and concurrent learning. (lec/sem 3) cr 3

#### Relational Practice IV (BSCN4206) (3 credits)

This course focuses on the development of relational praxis including emerging health care trends and associated nursing responsibilities. Opportunities are provided to critically examine and appraise intraprofessional, interprofessional, and intersectoral relationships for clientcentered care. Learners are required to integrate new and prior learning. (lec/sem 3) cr 3

#### Nursing Inquiry and Praxis III (BSCN4416) (3 credits)

This course focuses on promoting critical rationality in relation to selected topics for nursing inquiry. Opportunities are provided to systematically examine a current nursing issue through the theoretical application of methodological and ethical knowledge. Learners are required to integrate new and prior learning. (lec/sem 3) cr 3

#### Semester 8

#### Nursing Praxis and Professional Caring VIII (BSCN4094) (9 credits)

This course focuses on the critical integration of theoretical, empirical, ethical, and professional knowledge. Opportunities are provided to demonstrate competent, safe, ethical, and evidence-informed practice as learners transition toward the role of a novice practitioner. Learning experiences require the integration of new and prior learning (lec/sem 3, 360 hr exp) cr 9

#### Professional Growth VI (BSCN4157) (3 credits)

This course focuses on the examination of the underpinnings of leadership in promoting and maintaining high quality health care services. Opportunities are provided for learners to explore ongoing and potential changes within the practice setting. Learners are required to integrate new and concurrent learning. (lec/sem 3) cr 3

# Fitness and Health Promotion

Ontario College Diploma (2 Years - 4 Semesters ) (3040)705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# 6/2/2020

Section B.98

#### **PROGRAM OVERVIEW**

#### Fitness and Health Promotion gets an A+ in student satisfaction at 95.7%!

Students at Sault College will now have an opportunity to attend the University of Wales Trinity Saint David. Located on the Carmarthen Campus in the United Kingdom, Fitness and Health Promotion students will have the opportunity to transfer their credits to the University of Wales to receive a BSc (Hons) degree inPersonal Training. The University is part of a growing industry of educators with over 160 years of experience in offering physical education.

Sophie D'Agostino is a recent graduate of Sault College's Fitness and Health Promotion Program who is currently pursuing the transfer degree at the University of Wales Trinity Saint David.

I was originally planning to go away to an Ontario University to complete my Bachelor's Degree with my Fitness and Health Promotion Diploma from Sault College. This would normally take three years to complete. When I found out that I would be able to complete my Bachelor's Degree in one year at the University of Wales Trinity Saint David, I was ecstatic! This is a once-in-a-life-time opportunity to get out there and explore the world while getting my degree. There was no way I could let an amazing opportunity like this pass my by .

Do you see yourself as someone who enjoys helping others succeed? Do areas like fitness, healthy living and inspiring others to go that extra mile interest you? If so, Fitness and Health Promotion is for you. Our program will provide you with the skills to safely assess, design, implement and evaluate personal, group and community fitness and health promotion programs. It will also instil the communication and leadership skills in you to facilitate and coach these programs.

Study here, and you'll learn how you can be a key motivator to helping others reach goals they never thought they'd achieve.

- Students receive over 400 hours of supervised fieldwork experience in a variety of educational, public and private organizations
- Students will learn through hands-on experience and solid theoretical training delivered by experienced, knowledgeable and creative faculty
- As a graduate you can pursue varied employment opportunities as this field has increased popularity with government, public and private organizations
- Graduates will have the knowledge to seek personal training certification through the Canadian Society of Exercise Physiologists (CSEP-CPT) subject to membership fees and requirements that are the responsibility of the student / graduate pursuing the certification
- Graduates can pursue appealing opportunities to bridge their Fitness and Health Promotion diploma to a University Degree

In addition, as part of the program, qualified students may have the opportunity to earn nationally recognised industry certifications (subject to additional fees and successful completion of examintations).

#### **PROGRAM OUTCOMES**

A graduate of the Fitness and Health Promotion Program at Sault College will reliably demonstrate the

#### ability to:

- 1. conduct assessments of fitness, well-being, and lifestyle for clients and effectively communicate assessment results.
- 2. prescribe appropriate physical activity, fitness, active living, and lifestyle programs to enhance health, fitness, and well-being of clients.
- 3. utilize appropriate interviewing and counselling skills to promote or enhance health, fitness, active living, and well-being of clients.
- 4. collaborate with individuals in the selection and adoption of strategies that will enable them to take control of and improve their health, fitness, and wellbeing.
- 5. develop, implement, and evaluate activities, programs, and events which respond to identified needs and interests of clients and maximize the benefits of health, fitness, and well-being.
- 6. train individuals and instruct groups in exercise and physical activities.
- 7. contribute to community health promotion strategies.
- 8. assist in the development of business plans for health and fitness programs, activities, and facilities.
- 9. implement strategies and plans for ongoing personal and professional growth and development.
- 10. develop and implement risk management strategies for health and fitness programs, activities, and facilities.
- 11. interact effectively with clients, staff, and volunteers in health and fitness programs, activities, and facilities.

#### Reference

Ministry of Training, Colleges and Universities Fitness and Health Promotion Program Standards (MTCU 52209), August 2003

#### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C or U) and at least one of the following senior sciences: Grade 11 Biology or Physics (C) or Grade 12 Chemistry (C) or Grade 12 (U) Exercise Science or mature student status.

#### ACADEMIC RECOMMENDATIONS

In order to help you to make a decision about a career in Fitness and Health Promotion, we recommend that you complete Grade 12 Healthy Active Living Education and/or Exercise Science courses. A keen interest in leadership is also an asset.

#### **CAREER PATHS**

Fitness and Health Promotion is an increasingly popular health field. As the health of our population continues to decline the need for prevention and promotion of healthy lifestyles increases. As a Fitness and Health Promotion graduate you will have the skills to assess, motivate, educate and train the population and you will be situated to move quickly into this advancing field of employment.

This diploma program will position you to find employment as a personal trainer, health coach, group

fitness and activity leader in public and private healthy active living clubs/ agencies (fitness and recreation), workplace fitness programs and the fitness industry.

Opportunities exist for graduates to pursue a University education (subject to grade requirements):

- Bachelor of Science in Exercise Science at Lake Superior State University
- Bachelor of Science in Kinesiology at University of Guelph-Humber
- Bachelor of Health Science in Kinesiology at the University of Ontario Institute of Technology.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

#### **CLINICAL/LAB OR FIELD PLACEMENTS**

During the four semesters of this program, you will be able to gain valuable work experience and practically apply what you learn in class by visiting and working in private clubs, fitness facilities, schools and other organizations.

To learn and work in these areas, you'll need to complete and bring in certain forms at least two weeks before being scheduled to start your field work. Information regarding the requirements you will need will be sent to you once you apply to and are accepted into the program. Without completing the forms and submitting the forms to us in time, you will not be able to do your field work.

You will also need to complete a criminal record check with vulnerable sector search prior to commencing placement as you will be working with vulnerable populations during your placements. There is a cost to having this done, and we can let you know more about it once you get here and begin your studies.

You will also complete a health assessment form that will also be sent to you once you apply and are accepted into the program which you will need to complete and bring to the College's Health Centre.

#### The Health Assessment Form needs to have the following:

#### **Required:**

Valid and current two step TB test as required by placement

#### You will also need to show that you have completed:

- First Aid Certificate and CPR Level C (requires recertification annually)
- WHMIS (Workplace Hazardous Materials Information System)

#### Criminal Record Check with Vulnerable Sector Search

• This document is mandatory for agencies to grant access to vulnerable persons. You will be given detailed information about obtaining a current Criminal Record Check during the first month of

classes or when clinical placements are confirmed. (Note: If a criminal record exists or charges are pending, you are required to disclose this information to the Chair of the Health Programs before the start of your program.)

• Criminal Record Check with Vulnerable Sector Search is a yearly requirement that must be updated annually.

There is a cost to taking some of these tests, and you will have to pay for these. Finally, you will need to have a G.P.A. of 2.0 or higher in order to be considered for placement.

#### **Notice to International Students:**

- The necessary immunizations for your program can be obtained from your home country and you will need to submit those immunization records along with the College Health Form to the Sault College Health Centre.
- All other requirements (Standard First Aid, CPR, WHMIS, N95 Mask Fit, Criminal Record Check with Vulnerable Sector Search) must be obtained and completed after your arrival in Ontario.
- As per Canadian Immigration policy, all International students completing a program with a practicum (field/clinical placement) component must obtain a Coop/Work Permit from Immigration, Refugees and Citizenship Canada stating that they are permitted to attend practicum as in integral part of their studies. International students will not be able to attend placement without submitting this permit for verification.

For further information regarding clinical and field placement requirements for this program, please contact Lori Zuccato either by email: <u>lori.zuccato@saultcollege.ca</u> or by phone: 705-759-2554 ext. 2693.

#### **OTHER INFORMATION**

For more information contact Lisa Maidra at 705.759.2554, ext 2629 or email lisa.maidra@saultcollege.ca.

#### **PROGRAM OF STUDY**

#### SEMESTER 1

CMM110-3 College Communication Skills FIT101-3 Interpersonal Communication and Helping Skills in Fitness FIT107-3 Functional Anatomy FIT108-3 Personal Wellness and Lifestyle Change FIT109-3 Leadership I - Healthy Active Living for Children and Youth OPA104-4 Human Movement PNG111-3 Anatomy and Physiology I PSY120-3 Lifespan Development

#### **SEMESTER 2**

FIT151-3 Group Fitness FIT153-4 Leadership II - Healthy Active Living for Adults FIT154-3 Research and Trends in Wellness FIT155-3 Applied Exercise Physiology I FIT156-3 Fitness Assessments I NTR101-3 Sport Nutrition PNG121-3 Anatomy and Physiology II GEN100-3 Global Citizenship

#### **SEMESTER 3**

FIT202-3 Health Promotion I - The Foundations of Health Promotion FIT203-3 Prevention and Management of Injury FIT204-5 Leadership III- Healthy Active Living - Special Populations FIT206-3 Applied Exercise Physiology II FIT207-3 Fitness Assessments II FIT208-3 Group Fitness II

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 4**

FIT205-4 The Business of Fitness FIT251-4 Exercise Prescription FIT252-4 Health Promotion II - Community Mobilization FIT254-1 Career Preparation FIT255-18 Consolidating Field Placement

#### **Course Descriptions**

#### Semester 1

#### College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Interpersonal Communication and Helping Skills in Fitness (FIT101) (3 credits)

In this course students will learn the interpersonal communication skills necessary to become effective communicators in the fitness and health promotion fields. Students will develop the skills required to be effective when helping individuals to make healthy lifestyle changes. Students will also develop motivational techniques to increase client adherence. Effective interviewing will also be practised and applied to appropriate workplace scenarios. The helping relationship and qualities that enhance this relationship will be discussed and practised.

#### Functional Anatomy (FIT107) (3 credits)

This course examines the relationship between structure and function of the musculoskeletal system. The basic composition and function of the musculoskeletal system will be studied. The student will gain knowledge of the skeletal system and well as names, attachments and actions of the primary muscle groups. Application of musculoskeletal movement will be practiced through practical experience studying various exercises.

#### Personal Wellness and Lifestyle Change (FIT108) (3 credits)

This course will introduce and provide practical application of the concepts of wellness, fitness and lifestyle management. Emphasis will be placed on taking control of individual health and lifestyle habits so that the

student can understand the choices and effort necessary to take responsibility for health and well being. Through examination of personal lifestyle and health behaviours the students will gain the understanding necessary to apply these health promoting skills to others.

#### Leadership I - Healthy Active Living for Children and Youth (FIT109) (3 credits)

Students will develop effective leadership skills to design and implement age-appropriate physical activity programs for children and youth. Students will explore current research of active living as it applies to children and youth to create programs that will improve the physical fitness, health and well-being of this age group. Barriers to physical activity for children and youth and the necessity of supportive environments will be investigated. Leadership skills will be developed through various practical experiences.

#### Human Movement (OPA104) (4 credits)

This course will provide the student with a foundation in the principles of normal functional human movement. Essential terminology and concepts related to normal human movement, the articular system, components of movement, biomechanics, motor development and skill acquisition will be introduced. In addition, students will develop an understanding of normal growth and motor development, posture, balance, and body mechanics.

#### Anatomy and Physiology I (PNG111) (3 credits)

This course introduces the learner to the normal development, structures and functions of the human body. The learner will examine the physiological components of the human body, in order to obtain knowledge and understanding about how the structures and functions of the body are related.

#### Lifespan Development (PSY120) (3 credits)

The purpose of this lifespan development course is to examine the interrelationship of the biopsychosocial aspects of ages and stages from birth to late adulthood. Developmental psychology is the study of the processes that shape human development. The goals of studying life span development are description, explanation and optimization of human development throughout a persons entire life. Students will study the interaction between cultural, social and historical impacts and biological maturation to gain a holistic understanding of human development. In addition, to studying human development in a systematic way, students will gain a personal understanding of their own lives in the context of lifespan development.

#### Semester 2

#### Group Fitness (FIT151) (3 credits)

In this course the learner will identify, explain and demonstrate the necessary elements of a group exercise class. Students will learn the skills necessary to effectively design and safely implement and lead a group fitness class. Skills will be mastered through practice teaching, peer and instructor evaluation, and participating in various community group fitness class settings.

#### Leadership II - Healthy Active Living for Adults (FIT153) (4 credits)

The student will gain an understanding of adult human behaviour as it relates to initiating and adhering to healthy lifestyle changes. Several phases of adulthood will be defined and analyzed with special emphasis being placed on the role that healthy active living can play on improving the well-being of adults as they age. The role of supportive family and workplace environments will be explored as necessary components of a healthy active lifestyle for the adult. Through study and practical experience, the student will learn effective leadership techniques to design, conduct, and evaluate various purposeful physical activity sessions and active living presentations for adults. Students will investigate and participate in a variety of community active living leadership opportunities within private and community fitness facilities.

#### Research and Trends in Wellness (FIT154) (3 credits)

Students will learn to critically examine the latest research and trends in the rapidly-changing fitness and health promotion industry. Through discussion and independent study the students will learn to assess evidence based information and industry fads. Group and individual presentation of findings will assist students in developing their practical health promotion skills.

#### Applied Exercise Physiology I (FIT155) (3 credits)

This course is the first part of a two part series (Applied Exercise Physiology I and II). This course examines the physiological adaptations that take place within the human body during exercise and work including the muscular, nervous, endocrine, cardiovascular and respiratory systems. Bioenergetics and physiological adaptations to training will also be discussed.

#### Fitness Assessments I (FIT156) (3 credits)

This course is the first part of a two part series (Fitness Assessments I and II). This course will familiarize students with a variety of fitness assessments used to determine a persons cardiovascular capacity, muscular strength and endurance, body composition, and flexibility. Baseline testing such as blood pressure and heart rate readings will also be practiced. CSEP-PATH concepts will be introduced in this course to prepare students for the national CSEP-CPT examination. The student will be expected to demonstrate competence in the administration of learned assessments, as well as effective instruction, cuing and providing feedback to the client.

#### Sport Nutrition (NTR101) (3 credits)

In this course, students will gain an appreciation for the effects of nutrition on physical activity and athletic performance. Students will examine the functions, sources and utilization of the specific nutrients in the body with emphasis on the health and performance implications for the physically active individual. The course will also examine various dietary supplements and food drugs and their effects on health and athletic performance. Students will gain an understanding of energy pathways in the body and the concepts of body composition and weight control. Students will compare popular dietary trends, complete a dietary assessment and research various performance enhancing supplements in order to critically assess their value in fitness and athletic performance.

#### Anatomy and Physiology II (PNG121) (3 credits)

This course is a continuation of Anatomy and Physiology I and will further examine the relationship of body structures and their functions. Understanding of the remaining body systems will provideyou with knowledge and understanding about how these systems work together to carry on complex functions within the human body.

#### **Global Citizenship** (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 3

#### Health Promotion I - The Foundations of Health Promotion (FIT202) (3 credits)

This is the first course in a two course series (Health Promotion I and Health Promotion II). In this course, the theories and strategies of health promotion and their impact on society will be investigated. The student will be able to explain key health promotion definitions and concepts that provide the framework for health promotion application. Examination of the advancement of health promotion internationally, nationally, provincially and at the municipal level will be conducted. The student will examine social

marketing and conduct an audience analysis to be used in the development of a health promotion campaign to be conducted in Health Promotion II.

#### Prevention and Management of Injury (FIT203) (3 credits)

This course explores risk factors involved with regular exercise, and sport and exercise specific injuries. Basic first aid principles will be reviewed in relation to athletic injuries as well as the physiological cause and appropriate prevention techniques to prevent reoccurrence. The role of the athletic trainer or personal trainer when considering athletic equipment, playing surfaces and environmental factors such as heat and cold, and a variety of charting methods for client records will be included. This course will have both theory and applied components so students will gain practical knowledge along with their theory base.

#### Leadership III- Healthy Active Living - Special Populations (FIT204) (5 credits)

This course will provide students with the ability to identify special populations and modify variables to facilitate those with distinctive needs, cultural diversity and medical conditions to experience healthy active living. Characteristics of the athlete and effective leadership techniques for this special population will be addressed as well. Students will apply knowledge gained through study and practical experience to design, lead, evaluate and participate in a variety of activity sessions for diverse populations within the college setting and community.

#### Applied Exercise Physiology II (FIT206) (3 credits)

This course is the second part of a two part series (Applied Exercise Physiology I and II). This course applies concepts learned in Applied Exercise Physiology I to how various environments, including hot, cold and altitude, affect exercise and sport. It also applies concepts to how participation in exercise and sport affects various age groups and both genders. How ergogenic aids and common medications affect exercise will also be examined.

#### Fitness Assessments II (FIT207) (3 credits)

This course is the second part of a two part series (Fitness Assessments I and II). This course will further build upon the skills and concepts learned in Fitness Assessments I. Students will also develop an understanding of skill-related assessments to determine a persons speed, balance, coordination, power, and agility and assessments to determine functional mobility and muscle balance. The concepts of advanced assessments such as VO2 max testing will be introduced. CSEP-PATH concepts and skills will be enhanced to prepare students for the national CSEP-CPT examination. The student will be expected to demonstrate competence in the administration of learned assessments, as well as effective instruction, cuing and providing feedback to the client.

#### Group Fitness II (FIT208) (3 credits)

This course continues to enhance the necessary skills, acquired in Group Fitness (FIT151), to develop and lead a group fitness class. In this course the student will be exposed to a greater variety of group fitness styles, for example, Cycling, Step, Yoga, Pilates, Aqua-fit, and other specialty classes. The student will be challenged to identify, explain and demonstrate the necessary elements of each style of class and enhance their communication, leadership, motivational, and professionalism skills. Finally the student will be tasked to develop and instruct a group fitness class of their choice to their peers. In addition, this course will effectively prepare the student for various group fitness certifications in the industry.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 4

The Business of Fitness (FIT205) (4 credits)

In this course, the student will investigate the fitness industry, the career opportunities, associated risks and effective management of programs, facilities and personal training businesses. Fundamental business principles of daily management of facilities and programs will be applied to the fitness industry. Practical experience will involve conducting basic market research and development of a customer service-oriented marketing plan. Facility tours and guest lecturers will enhance learning experiences.

#### Exercise Prescription (FIT251) (4 credits)

This course gives the student the theory and practical knowledge required to design individual training and lifestyle programs tailored to the clients needs and wants. Topics covered include: client assessment and interviews, exercise monitoring, and program design for cardiovascular fitness, strength training, endurance training, flexibility, and weight loss and weight control. Students will gain practical experience through training a client.

#### Health Promotion II - Community Mobilization (FIT252) (4 credits)

The learner will interpret, apply and evaluate health promotion strategies for a variety of situations, including schools, workplaces, health service organizations and entire communities. This course will provide the student with the knowledge of resources and networking opportunities available to create and message a successful health promotion campaign. The student, through analysis of a target market (identified in Health Promotion I) will develop an appropriate health promotion intervention to encourage communities to take personal responsibility for their health.

#### Career Preparation (FIT254) (1 credits)

This course is designed to prepare students for entry into the professional business of fitness and health promotion. Emphasis is placed on strengthening resume writing, interviewing and employability skills. General professional issues will also be reviewed and discussed. Plans for ongoing personal and professional growth and development will be examined and the student will clarify their own professional philosophy and role in the health, fitness and well-being field of practice.

#### Consolidating Field Placement (FIT255) (18 credits)

This course is the consolidating practicum for the Fitness and Health Promotion program. Students will be placed in a community setting where, under supervision; they will carry out duties as defined by the student, the agency supervisor and the program faculty. The goal of practicum is to provide the students the opportunity to apply the knowledge, skills and values at an entry level position in the field of health promotion and fitness. Students will meet the outcomes of the course within a270 hour framework.

# Gerontology

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (3041)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



#### **PROGRAM OVERVIEW**

The Gerontology Certificate Program provides students with the knowledge and skills for not only understanding, but also successfully working with and on behalf of older clients. Emphasis is on services for elders using a holistic, quality-focused and inter-professional approach aimed at reaching safe and optimal level of functioning. In addition, students will be provided the skill set to become leaders as elder-advocates.

#### **PROGRAM OUTCOMES**

1. Comply with legislation and regulations governing professional practice within the Canadian health care system.

2. Apply an evidence based perspective to inform current interventions, senior care plans; programs or services.

3. Consider the availability and effectiveness of community resources and referrals to plan, navigate and advocate for senior care.

4. Analyze the strengths and needs of seniors independently or with an interprofessional team to plan, implement and evaluate programs.

5. Assess the communicative, mental, physical, emotional and social health of older adults to promote healthy aging.

6. Communicate effectively to promote person and family centered care and strengthen interprofessional collaborative practice.

7. Appraise the important role of the elder-advocate who works pro-actively as an individual or in interprofessional teams and the impact they have on elderly clients` healthy aging.

#### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma or Degree or equivalent, preferably in a health care or social work field, OR an acceptable combination of related work experience and post secondary education (as determined by the College).

(Applicants, whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.)

#### **CAREER PATHS**

Job opportunities will depend on the educational background prior to specializing in Gerontology with this

certificate and include: Retirement Homes; Senior Centres; Home Care; Long Term Care Facilities; Hospitals; Community Organizations; and Non-Profit Agencies.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,025.80	\$1,117.00	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

#### **CLINICAL/LAB OR FIELD PLACEMENTS**

Included in this program is a practicum experience in which you will gain valuable experience. You will be working with clients and families in a variety of circumstances. Further, you will have many opportunities to make a positive difference in their lives.

To be able to attend these practicum experiences, you'll need to complete the requirements listed below and bring in documents to support completion prior to starting your practicum placement. This is necessary to have in place before practicum starts as planning begins several weeks in advance. Having your requirements completed ensures that you are able to gain the experience needed to meet the course outcomes successfully.

- 1. WHMIS Certificate (current within one year)
- 2. N95 Mask Fit Testing Card (renew every 2 years). Successful mask fit testing requires a **clean shaven face** (minimal facial hair) to administer the test.
- 3. Immunization & Health Record
- A complete College Health Form along with official immunization documentation must be submitted to the College Health Centre. Contact your health care provider, medical clinic or in Sault Ste. Marie and District, Algoma Public Health if you need to update your immunization record.

#### Documentation of the following is required:

- proof of a 2-step Mantoux test for tuberculosis. For a known positive test, you must be assessed by a physician and receive medical documentation to have access to placement (a chest x-ray is required). If a 2-step was completed over a year ago; a 1 step TB test is required.
- proof of measles, mumps and rubella immunization
- proof of tetanus/diphtheria immunization
- proof of chicken pox immunization
- Influenza immunization each October/November of the program. The flu vaccine is not mandatory however in the event that a student refuses the vaccine, the student must follow placement agency policies. This may mean removal from clinical placement for the duration of an influenza outbreak. Students can contact their coordinator if they have any questions.
- **NOTE:** Hepatitis B vaccination is not mandatory but strongly recommended.

#### Criminal Record Check with Vulnerable Sector Search

• This document is mandatory for agencies to grant access to vulnerable persons. You will be given detailed information about obtaining a current Criminal Record Check during the first month of classes or when clinical placements are confirmed. (Note: If a criminal record exists or charges are pending, you are required to disclose this information to the Chair of the Health Programs before the start of your program.)

• Criminal Record Check with Vulnerable Sector Search is a yearly requirement that must be updated annually.

All costs associated with these requirements are the responsibility of the student.

You will also sign a Statement of Confidentiality Form.

#### Notice to International Students:

- The necessary immunizations for your program can be obtained from your home country and you will need to submit those immunization records along with the College Health Form to the Sault College Health Centre.
- All other requirements (WHMIS, N95 Mask Fit, Criminal Record Check with Vulnerable Sector Search) must be obtained and completed after your arrival in Ontario.
- As per Canadian Immigration policy, all International students completing a program with a practicum (field/clinical placement) component must obtain a Coop/Work Permit from Immigration, Refugees and Citizenship Canada stating that they are permitted to attend practicum as in integral part of their studies. International students will not be able to attend placement without submitting this permit for verification.

For further information regarding clinical and field placement requirements for this program, please contact Lori Zuccato either by email: <u>lori.zuccato@saultcollege.ca</u> or by phone: 705-759-2554 ext. 2693.

#### **OTHER INFORMATION**

For more information, contact Chair of Health Programs Bob Chapman at 705-759-2554 ext. 2826 or via email at <u>Bob.Chapman@saultcollege.ca</u>.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

GER131-3 Introduction to Gerontology GER132-3 Physical Health of the Elderly Person GER133-3 Mental Health of the Elderly Person GER134-3 Relational Practice HCA111-3 Communications for Healthcare Professionals

#### **SEMESTER 2**

GER231-3 Spirituality and End-of-Life Issues GER232-3 Being and Elder-Advocate: Gerontological Social Action GER233-3 Complimentary Approaches for Elder Comfort GER234-3 Rehabiliation and Restorative Care GER235-3 Proposal Writing and Research

#### **Course Descriptions**

#### Semester 1

#### Introduction to Gerontology (GER131) (3 credits)

In this course, students will discuss a variety of definitions and concepts related to aging, from an inter-professional perspective. Since people are living longer, the quality of life as we age becomes more important. Many elders will have more leisure years out of the workforce than ever before, or they may choose to work after the national age of retirement. With an extended life expectancy, such factors as health, housing, transportation, finances, family and community support systems become important

issues. We will examine these factors and others throughout this introductory course.

#### Physical Health of the Elderly Person (GER132) (3 credits)

Students will explore the meaning of health to the elderly person. They will learn basic assessments from a holistic perspective, including physical, emotional, social, environmental, and communication. They will study the physiology of aging, health promotion, disease prevention, risk reduction, and basics about the most common complex health challenges of the elderly.

#### Mental Health of the Elderly Person (GER133) (3 credits)

Students in this course will explore mental health and illness disorders which are either more common in the elderly or have continued to develop in the elderly over time. Various cognition issues including dementia will be studied, and appropriate interventions and care options will be explored. Students will have an opportunity to gain a certificate in the Gentle Persuasive Approach (GPA).

#### Relational Practice (GER134) (3 credits)

Relational Practice emphasizes competencies in communication with clients and inter-professional interactions. The concepts of caring and empathy are foundational in communications with clients in a therapeutic relationship. Critical thinking is another important skill to be mastered within communication. Students will also learn how different concepts affect communication, such as: culture, cultural humility, authenticity, respect, curiosity, and ethics. Reflexive practice is exercised during this class. A 30-hour clinical experience will provide opportunities for students to apply their knowledge communication. The intention of this course is for students to be active learners by relating course concepts to practice. Learners will have opportunities to develop caring relationships as they engage with the well elderly in community settings.

#### Communications for Healthcare Professionals (HCA111) (3 credits)

This course provides students with the resources and skills to communicate in an effective, professional manner in a health care setting, both internally and externally to the organization. Students will apply best practices in communication in both oral and written formats. Students are expected to use a variety of resources, technologies, and social media to interact with stakeholders

#### Semester 2

#### Spirituality and End-of-Life Issues (GER231) (3 credits)

This course will concentrate on End-of-Life issues using the lens of different concepts such as: family, culture, spirituality, death, dying, grief, and quality of life. The ethical care of the dying will be studied from a holistic perspective. Learners will gain an understanding of the resources and options available to clients.

#### Being and Elder-Advocate: Gerontological Social Action (GER232) (3 credits)

The student will study the ethical, legal, cultural, medical, and social issues of elders. They will also learn how to advocate for positive changes on behalf of individuals or groups. A 30-hour clinical experience will provide opportunities for students to apply their knowledge to social action. The intention of this course is for students to be active learners by relating course concepts to practice. Learners will have opportunities to develop a plan to invoke positive change or advocate for a particular outcome.

#### Complimentary Approaches for Elder Comfort (GER233) (3 credits)

This course will help students understand how to integrate complementary therapies to improve the quality of life for the elderly.

#### Rehabiliation and Restorative Care (GER234) (3 credits)

Learners will focus on the elements of restorative care for clients in the community or long term care facilities. They will understand the need to design, implement, and evaluate programs which are meant to return clients to the highest level of functionality possible.

#### Proposal Writing and Research (GER235) (3 credits)

Students will learn how to write proposals to request funding or to suggest new programming. The importance of research to support funding requests and the construction of new knowledge will be studied.

# Health Care Leadership - Canadian Context

Section B.100 6/2/2020

**Ontario College Graduate Certificate (2 Years - 4 Semesters ) (5985)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



#### **PROGRAM OVERVIEW**

### Please note that the Health Care Leadership - Canadian Context program is currently only available for delivery at our Toronto Campus.

This Ontario College Graduate Certificate has been designed for those who currently have a degree or diploma and wish to continue their education in Health Care Leadership. It is preferable if the previous education is in health care and the person has experience working in the health care field. This program is specifically designed to support students transitioning into the Canadian environment. Students of this program will develop professional leadership skills, project management skills, and quality management skills to support health care operations using a culturally competent approach. Students will learn patient and family care theories and patient safety to ensure quality health care operations within health care organizations in Canada. This program includes an Internship in the fourth semester, giving students the opportunity to exercise their learning and gain Canadian work experiences in a health care leadership role. Graduates of this program will have gained administrative and leadership skills preparing them for leadership roles in a variety of health care settings.

#### **PROGRAM OUTCOMES**

1. Communicate effectively and appropriately with patients, families, and members of both the health care and administrative teams to maintain a wholly interactive environment.

2. Practice and support evidence informed decision making, using critical thinking skills and best leadership practices to lead sustainable health care operations.

3. Practice within the legal, ethical and professional scope of practice of a leader in Ontario's health care system to maintain the integrity of the health care organization.

4. Address the needs of a diverse patient population using best practices to ensure progressive and positive processes within a health care facility.

5. Utilize progressive, professional leadership concepts with a culturally competent approach to achieve organizational and health system goals within an interprofessional health care team.

6. Apply accounting and financial principles to support the management and operations of an organization.

7. Utilize health care technology and informatics for the benefit of the patients and support of the institution.

8. Outline strategies to manage risks in the business activities of a health care organization to obtain a sustainable organization.

9. Develop and maintain ongoing personal and professional development to improve work performance in health care leadership.

10. Apply patient and family quality care theories and core concepts of patient safety into current practices to achieve enhanced patient outcomes and positive experiences in the health care setting.

11. Apply principles of operational planning, project management, and quality management to support health care operations.

#### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, Degree or equivalent.

It is preferred that students have an educational background in a health-related field, or an acceptable combination of related work experience and post-secondary education (as determined by the College).

Applicants, whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
N/A	N/A	\$25,118.60	\$1,157.50

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

#### **PROGRAM OF STUDY**

#### SEMESTER 1

HCA111-3 Communications for Healthcare Professionals HCA112-3 Health Infomatics HCA113-3 Policy in Health Care HCA114-3 Leadership in Health Care Administration HCA115-3 Ethics in Health Care Administration HCA116-3 Financial Processes for Health Care Facilities

#### **SEMESTER 2**

HCA117-3 Managing in a Health Care Setting HCA118-3 Innovation in Health Care HCA119-3 Legal Aspects of Health Care Administration HCA125-3 Critical Thinking & Evidence Informed Practices HCA126-3 Health Care Operations HCL202-3 Cultural Competence for Health Care Providers

#### **SEMESTER 3**

HCL101-3 Patient and Family Centered Care HCL102-3 Patient Safety HCL201-3 Leadership Communication, Collaboration and Relationships HCL203-3 Project Leadership in Health Care HCL301-3 Job Search and Success HCL302-3 Group Capstone for Health Care Leadership

#### **SEMESTER 4**

HCL401-10 Health Care Leadership Internship

#### **Course Descriptions**

#### Semester 1

#### Communications for Healthcare Professionals (HCA111) (3 credits)

This course provides students with the resources and skills to communicate in an effective, professional manner in a health care setting, both internally and externally to the organization. Students will apply best practices in communication in both oral and written formats. Students are expected to use a variety of resources, technologies, and social media to interact with stakeholders

#### Health Infomatics (HCA112) (3 credits)

This course is intended to provide student with computer literacy relevant to health care sector managers. Important skills would include: word processing, use of spreadsheets, importing data, presentations and researching. There is also a focus on secure information systems, such as electronic health records. Students will learn about confidentiality, security and privacy standards to be maintained, eg. Personal Health Information Protection Act. Students will learn about trends, new electronic information systems and software programs.

#### Policy in Health Care (HCA113) (3 credits)

In this course, students will study the Canadian Health Care System from the perspectives of history, the law, the economy, politics, ethics and the national social background. Students will gain an understanding of current issues and what drives evolution of the health care system. Students will study policy development, importance to the system and current trends. Impacts on the health care system, in terms of access, utilization and outcomes will be studied.

#### Leadership in Health Care Administration (HCA114) (3 credits)

This course provides an introduction to frameworks and practices of effective health care leadership.

Students will learn how to apply strategies and attitudes to lead themselves, inspire and engage others, and build productive teams, coalitions and partnerships to achieve organizational and health system goals. Students will explore strategies to lead up, across and down. They will apply tools such as project chartering and management, strategic planning, cascading scorecards, team huddles, and regular status updates to achieve and sustain results.

#### Ethics in Health Care Administration (HCA115) (3 credits)

Students will study ethical standards and how to apply ethical decision frameworks in the decision making process. Patient safety will be highlighted to support the development of attitudes of accountability and caring within the organization. Studies will focus on decision making based on different ethical theories while considering the patient/family perspectives. Important concepts will be considered within the context of the client/patient/family, eg. Religion, spirituality, beliefs and culture.

#### Financial Processes for Health Care Facilities (HCA116) (3 credits)

This course provides students with basic accounting and budgeting principles. They will learn about a variety of financial resources and practices they can use for decision making about financial aspects of management in a health care environment. Students will learn about different funding models and how to operationalize the current budget of a unit/division within a larger institution. They will learn to analyze and convey important financial reports, becoming familiar. They will be subjected to performance evaluation, scorecards that measure a variety of outcomes. Students will be introduced to the funding and financial environments of Ontario health care organizations, as well as what affects them, eg. Industry standards, best practices, trends, and access.

#### Semester 2

#### Managing in a Health Care Setting (HCA117) (3 credits)

This course will allow the students to explore health care trends impacting the management of human resources. It supports students` growth as managers and leaders to respond to common human resource issues. Students will gain the knowledge and skills needed to effectively manage staff and support a positive organizational culture. They will learn about leading and managing within a unionized work environment.

#### Innovation in Health Care (HCA118) (3 credits)

This course provides students with decision-making skills to lead or assist change within an organization. Students will learn how to engage in a variety of problem-solving methods, such as creative, rapid cycle improvement, Plan, Do, Study, Act (PDSA), and critical thinking. Students will apply these models to lead innovation and continuous improvement to concentrate on any healthcare quality issues or risks.

#### Legal Aspects of Health Care Administration (HCA119) (3 credits)

Health care in Ontario is based on laws which the students need to know in order to understand how organizational governance, professional practice, and health care policies evolve. This knowledge will support the critical thinking required to develop resolutions to legal issues or risks associated with health care. This course is expected to guide students to realize the connections between quality, safety, and risk. Through the use of risk prevention & management methods, students will be empowered to be proactive in the identification of actual or potential risks and safeguard due diligence.

#### Critical Thinking & Evidence Informed Practices (HCA125) (3 credits)

Students will study a variety of sources for the important information and statistical data which serve as a basis for decision making. Evidence informed practice is a model which requires an administrator / leader to engage with research to guide decision making and best practices. Students will learn how to review and analyze research methodology, outcomes, and recommendations.

#### Health Care Operations (HCA126) (3 credits)

This course will provide students with an understanding of the content in which health care organizations function. Students will also study management methods and receive resources to support operational activities. Areas of study will include: infrastructure management, supply chain and procurement, safety and security, occupational health and safety, emergency response planning, insurance and claims management.

#### Cultural Competence for Health Care Providers (HCL202) (3 credits)

Cultural competence is an integral part of providing quality, patient and family-centered care. Cultural competence and culturally effective care are also critical for improving health outcomes, patient safety and patient satisfaction. Health care providers in Canada need knowledge and skills to deliver culturally

competent and culturally appropriate care in today's multicultural society. This course examines concepts related to cultural competency, diversity, the nature of organizational culture, transcultural caring and change in Canadian health care organizations and systems.

#### Semester 3

#### Patient and Family Centered Care (HCL101) (3 credits)

Patient and Family-Centered Care (PFCC) is an approach to the planning, delivery and evaluation of health care based on mutually beneficial partnerships among patients, families and health care professionals. These partnerships occur at the clinical, program, organizational and policy levels to assure the quality and safety of health care delivery. This course focuses on effective leadership strategies to advance the practice of patient and family-centered care within health care organizations.

#### Patient Safety (HCL102) (3 credits)

Ensuring patient safety and healthcare quality is critical to everyone in healthcare practice. This course provides healthcare professionals with the knowledge, skill and systems thinking needed to lead the implementation of effective quality and patient safety programs within a Canadian health care organization. Learners will examine evidence informed, best practices and elements needed to create a culture of safety and one that engages patients in patient safety. Topics also focus on concepts of human factors, technology, medical errors and the standards and organizational practices which govern quality, safety and risk management in Canadian health care today.

#### Leadership Communication, Collaboration and Relationships (HCL201) (3 credits)

Collaborative Communication is at the foundation of effective engagement, top performance and innovative outcomes. Creating the context for collaboration, and engaging in open and skillful dialogue, creative problem-solving and effective coordination are essential leadership skills in today's workplace. Participants will learn the benefits and impact of collaboration and apply new concepts as they practice engaging in collaborative communication. This course is grounded in the framework of emotional intelligence (EI) and is designed to help participants enhance their EI in terms of both personal and social competence.

#### Project Leadership in Health Care (HCL203) (3 credits)

This course is designed to help participants develop competencies by way of knowledge, skills and attitudes needed to perform effectively as members of project teams, as project managers or as functional managers in the health care setting who use projects as building blocks in the design and execution of health care organizational strategies. The emphasis is placed on application to demonstrate how projects can be used to develop and execute strategic initiatives in preparing the organization for its uncertain future. The course emphasizes an integral view of projects involving cross-functional and cross organizational teams as highly versatile strategic resources and key elements for strategic planning, organizing, motivating, directing and controlling projects. Topic areas include Human Relations, Change Management, Social Responsibilities.

#### Job Search and Success (HCL301) (3 credits)

This course is designed to give the student an understanding of how to conduct a job search and how to succeed in the Canadian work place. This includes self-reflection, effectively designing a cover letter and resume, online job searches utilizing social media, behavioural based interviewing as well as marketing oneself effectively in a job interview. Job safety, successful work strategies and harassment and discrimination plan of action is also discussed.

#### Group Capstone for Health Care Leadership (HCL302) (3 credits)

Students will be expected to work in teams to do a needs or gap assessment to identify a current issue recognized by Canadian health care administrators. Once identified, the topic will be researched thoroughly using the literature, focus groups, and consultation with subject matter experts. A thorough analysis of the issue will be required and the students will develop an in-depth plan to respond to the problem. The knowledge acquired in all of the courses in the Program of Study for Health Care Leadership will be utilized throughout this major project.

### Semester 4

### Health Care Leadership Internship (HCL401) (10 credits)

This Internship will provide students with the opportunity to broaden their skills in Health Care Leadership through on-the-job training in a Canadian health care setting. They will gain Canadian health care industry experience, improve their employability, network with professionals in their field, as well as completing the academic requirements for their program. Employment Specialists will work with students to ensure that the perfect match is being made between intern and employer.

# Occupational Therapist Assistant and Physiotherapist Assistant

Section B.101 6/2/2020

**Ontario College Diploma (2 Years - 4 Semesters ) (3022)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

As a student in the Occupational Therapist Assistant and Physiotherapist Assistant Diploma program, you will gain hands on experience to help prepare you to work in both fields of Occupational Therapy and Physiotherapy, under the supervision of an Occupational Therapist and/or a Physiotherapist. In addition you will:

- Learn to assist individuals regain or maintain independent function and mobility
- Participate in introductory fieldwork activities beginning in the first semester and gain valuable training from experienced clinicians in the workplace
- Experience student centred learning in active classrooms and small labs with individualized attention
- Have the opportunity to transfer to other Universities to pursue a degree

### **Accreditation Status:**

The OTA & PTA Program at Sault College has been accredited by the Occupational Therapist Assistant and Physiotherapist Assistant Education Accreditation Program (OTA & PTA EAP) in collaboration with Physiotherapy Education Accreditation Canada (PEAC) and the Canadian Association of Occupational Therapists (CAOT). The status of Accreditation was granted to the program on November 30, 2016 for the period until November 30, 2022.

Mailing Address:

- Occupational Therapist Assistant and Physiotherapist Assistant Education Accreditation Program
- c/o Physiotherapy Education Accreditation Canada
- Suite 26, 509 Commissioners Road West
- London, Ontario N6J 1Y5
- (226) 636-0632
- <u>otapta.ca</u>

#### **Program Mission Statement:**

 The Occupational Therapist Assistant and Physiotherapist Assistant Program at Sault College is committed to empowering students to become self-directed lifelong learners in the fields of Occupational Therapy and Physiotherapy. Graduates of the program, as entry-level workers, shall have the knowledge, skills and attitudes that are necessary to perform the duties of an Occupational Therapist Assistant and a Physiotherapist Assistant. Upon successful completion of the program, graduates will receive an Ontario College Diploma.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C and Grade 11 Biology (SBI3C), or

mature student status.

#### ACADEMIC RECOMMENDATIONS

While you consider this program, we encourage you to explore the fields of Physiotherapy and Occupational Therapy with professionals in the field, and where possible, volunteer in a setting where these services are provided.

In addition to admission requirements (English and Biology), the Ontario highschool course Intro to Kinesiology (PSK4U) is recommended as an excellent preparatory course.

Mature students who are in need of upgrading, are advised to take an equivalent to Grade 11 Biology and Grade 12 English. The Academic and Career Entrance (ACE) program is offered at Sault College at no tuition cost.

Students in the Occupational Therapist Assistant and Physiotherapist Assistant program should be in good physical and mental health. Students should demonstrate reliability, accountability, self-direction and good interpersonal communication skills. Any prospective students with concerns regarding their ability to meet the functional demands of the program are advised to discuss this with the program coordinator and their physician.

# **CAREER PATHS**

As a graduate, you may work as an Occupational Therapist Assistant, Physiotherapist Assistant and/or a Rehab Assistant in a variety of settings including: Acute Care Hospitals, Rehabilitation Hospitals, Children's Rehabilitation Centers, Community Care (Home Care), Convalescent Care Facilities, Private Physiotherapy Clinics, Occupational Therapy Centers, Disability Management Services and Long Term Care Facilities.

In addition graduates have applied their knowledge and skills in other settings including: Health and Rehabilitation Equipment Vendors, Equipment Repairs, Chiropractic Clinics, Consumer Organizations (for example, Brain Injury Association, Arthritis Society of Canada, March of Dimes) and the Alzheimer's Society.

Graduates of the program may be eligible to purse further education at Algoma University, Lake Superior State University, Laurentian University, and University of Northampton. All graduates are subject to the transfer and entrance requirements set out by each post-secondary institution.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

#### **DRESS CODE**

#### Dress Code for Fieldwork

As a student in the Occupational Therapist Assistant and Physiotherapist Assistant Program at Sault College, you will develop a professional image and professional behaviours for fieldwork placements. Presenting oneself as a professional is expected by the public served, by the facilities which provide fieldwork opportunities and by the Occupational Therapists and Physiotherapists who will supervise you.

When on fieldwork assignments you will wear school uniforms, which consist of Scrubs with Name and Logo.

Detailed information regarding the purchase and use of the uniform will be provided in class in September, Semester One.

Footwear must consist of casual or athletic shoes (closed heel and toe, non-skid soles).

# **CLINICAL/LAB OR FIELD PLACEMENTS**

As a student in the Occupational Therapist Assistant and Physiotherapist Assistant program at Sault College you will begin your first fieldwork in Semester One and continue with fieldwork placements in the following semesters to enhance your clinical knowledge and skills and become familiar with policies and procedures in different health care settings. The Sault College Physiotherapy Clinic on campus provides services to the students and staff at Sault College, and enables Occupational Therapist Assistant and Physiotherapist Assistant students to gain fieldwork placements on campus. The Health Science Simulation Lab will also be part of your fieldwork preparation. You will have the opportunity to work with high fidelity mannequins, learning how to take vital signs like blood pressure and heart rate. You will participate in patient simulations such as total hip replacements, amputations and strokes. In Semesters 2 and 3 you will experience a variety of clinical and community fieldwork placements such as:

Sault College Physiotherapy Clinic, Hospitals, Long Term Care Facilities, Retirement Homes, Physiotherapy and Occupational Therapy Clinics, Children's Rehabilitation Centres, Community Care Access Centres (Home Care), Schools, Community Agencies such as March of Dimes, Breaking Away and the Sault Ste. Marie Accessibility Centre.

Students will participate in fieldwork during all four semesters of the program. In the latter part of semester four you will complete fieldwork hours on a full-time basis for at least ten weeks, where you will gain valuable work experience and employment references. Students should be prepared to travel outside of Sault Ste. Marie in order to complete the required fieldwork placement hours. Any expenses related to travel and accommodation during fieldwork will be the responsibility of each student.

Applicants will be required to submit documentation of the following fieldwork requirements in September of Semester One in order to be eligible to participate in fieldwork assignments:

#### **Criminal Record Check with Vulnerable Sector Search**

- This document is mandatory for agencies to grant access to vulnerable persons. You will be given detailed information about obtaining a current Criminal Record Check during the first month of classes or when clinical placements are confirmed. (Note: If a criminal record exists or charges are pending, you are required to disclose this information to the Chair of the Health Programs before the start of your program.)
- Criminal Record Check with Vulnerable Sector Search is a yearly requirement that must be updated annually.

All costs associated to these requirements are the responsibility of the student.

CPR (Level C), WHMIS, and First Aid Certificates: Students are required to provide evidence of current certification for these. Students are responsible for maintaining annual CPR (C Level) certification throughout their program.

N95 Mask Fit Testing Card (renew every 2 years). Successful mask fit testing requires a **clean shaven face** (minimal facial hair) to administer the test.

An Immunization & Health Record Form from the Sault College Health Services office must be completed. As a student of the Occupational Therapist Assistant and Physiotherapist Assistantprogram at Sault College you will be required to show evidence of the following immunization requirements:

Required: Two-step TB test initially, with the One-step repeated yearly; immunity against measles, mumps, and rubella; current tetanus-diphtheria; proof of Hepatitis B vaccine series or Twinrix series (either one is acceptable).

Note: Influenza immunization each November of the program. The flu vaccine is not mandatory however in the event that a student refuses the vaccine, the student must follow placement agency policies. This may mean removal from clinical placement for the duration of an influenza outbreak. The vaccine takes two weeks to come into effect and therefore students who do not get it by the established deadline may be removed from clinical. Students can contact their coordinator if they have any questions.

A Statement of Confidentiality will be signed prior to beginning any fieldwork assignments. Due to the physical nature of some of the skills and competencies required for success in the program, a physical demands analysis may be requested by the field placement facility.

In some circumstances students may need to complete their fieldwork hours in the spring semester.

#### Notice to International Students:

- The necessary immunizations for your program can be obtained from your home country and you will need to submit those immunization records along with the College Health Form to the Sault College Health Centre.
- All other requirements (Standard First Aid, CPR, WHMIS, N95 Mask Fit, Criminal Record Check with Vulnerable Sector Search) must be obtained and completed after your arrival in Ontario.
- As per Canadian Immigration policy, all International students completing a program with a practicum (field/clinical placement) component must obtain a Coop/Work Permit from Immigration, Refugees and Citizenship Canada stating that they are permitted to attend practicum as in integral part of their studies. International students will not be able to attend placement without submitting this permit for verification.

For further information regarding clinical and field placement requirements for this program, please contact Lori Zuccato either by email: <u>lori.zuccato@saultcollege.ca</u> or by phone: 705-759-2554 ext. 2693.

# **OTHER INFORMATION**

#### Who You'll Meet

Andrea Sicoli, B.Sc.O.T. Andrea is a Registered Occupational Therapist and teaches OT Skills, Interpersonal Skills and other courses in theOccupational TherapistAssistant and Physiotherapist Assistantprogram. She also provides consultative OT services within the community. She is a graduate of the University of Toronto, Toronto Ontario.

Joanna MacDougall, B.Sc.P.T., M.Sc.P.T. Joanna is a Registered Physiotherapist and teaches PT Skills and other courses in the Occupational Therapist Assistant and Physiotherapist Assistant program. She has initiated the development of the Sault College Physiotherapy Clinic on campus, which provides services to students and staff at Sault College, and enables Occupational Therapist Assistant and Physiotherapist Assistant students to gain fieldwork on campus. Joanna is a graduate of Queen's University, Kingston Ontario and the University of South Australia, Adelaide, Australia.

Lab Specialist and Fieldwork Liaison: Assists in most labs in the Occupational Therapist and Physiotherapist Assistant program and mentors students on fieldwork placement.

For more information contact Program Coordinator Andrea Sicoli at 705.759.2554, ext 2541 or email <u>andrea.sicoli@saultcollege.ca</u>.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I OPA101-3 Fitness & Wellness: Principles and Applications OPA103-5 Human Anatomy OPA104-4 Human Movement OPA116-2 Fieldwork Practicum I OPA117-2 Interpersonal Communication in Rehabilitation I OPA118-2 The Health Care System and Rehabilitation PSY120-3 Lifespan Development

### **SEMESTER 2**

OPA107-3 Applied Human Movement OPA109-3 Physical Agents OPA110-3 Physiotherapy Clinical Skills I OPA115-6 Occupational Therapy Principles and Clinical Skills I OPA130-3 Clinical Pathology I OPA131-5 Fieldwork Practicum II GEN100-3 Global Citizenship

#### **SEMESTER 3**

OPA203-3 Physiotherapy Clinical Skills II OPA204-3 Occupational Therapy Clinical Skills II OPA214-3 Mental Health Conditions & Psychosocial Issues OPA216-3 Clinical Pathology II OPA217-5 Fieldwork Practicum III OPA218-3 Interpersonal Communication in Rehabilitation II

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **SEMESTER 4**

OPA208-6 Clinical Case Studies OPA209-2 Documentation Skills for the OTA/PTA OPA211-1 Professional Topics in Rehabilitation OPA226-10 Fieldwork Practicum IV OPA227-10 Fieldwork Practicum V

#### OPA228-2 Communication Disorders in Rehabilitation

# **Course Descriptions**

### Semester 1

### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

### Fitness & Wellness: Principles and Applications (OPA101) (3 credits)

This course considers the impact of the determinants of health on the well-being of individuals. Topics include (but are not limited to): dimensions of wellness, positive lifestyle choices, self-management and behaviour change techniques, exercise prescription, fitness training methods, nutrition, injury prevention and body fat management. Through participation in hands-on learning experiences, the student gains the knowledge and skills necessary to make positive lifestyle changes for themselves and others. The student will gain knowledge and skill in the application of techniques relevant to lifelong health and wellness.

### Human Anatomy (OPA103) (5 credits)

During this course the student will develop a knowledge base of anatomy and physiology of the human body with special attention to the neurological and musculoskeletal systems, as required for the needs of the Occupational Therapist Assistant and Physiotherapist Assistant. Other systems addressed in this course include the special senses of the eye and ear, as well as the cardiovascular system, respiratory system, digestive system, urinary system and reproductive system. The lab component will focus on developing competence in the identification and palpation of musculoskeletal surface anatomy.

#### Human Movement (OPA104) (4 credits)

This course will provide the student with a foundation in the principles of normal functional human movement. Essential terminology and concepts related to normal human movement, the articular system, components of movement, biomechanics, motor development and skill acquisition will be introduced. In addition, students will develop an understanding of normal growth and motor development, posture, balance, and body mechanics.

#### Fieldwork Practicum I (OPA116) (2 credits)

This course will prepare the student for success in fieldwork placements which are an essential part of their clinical education in the OTA and PTA program. The student will be encouraged and guided towards the expectations of professionalism and competence as an OTA/PTA. The student will become familiar with different health care facilities in Sault Ste. Marie and the Sault College Health Science Simulation Lab as they prepare for their role as a student during fieldwork placements.

#### Interpersonal Communication in Rehabilitation I (OPA117) (2 credits)

This course will provide the student opportunities to develop increased self-awareness. Determinants of behavior such as personality, attitudes, values and beliefs will be explored. The importance of appropriate and effective verbal and non-verbal communication as an interpersonal skill will be emphasized. Students will recognize the influence of stress on interpersonal skills and discuss strategies to manage stress and improve well-being. Though discussion, role playing and reflective activities, students will understand and

demonstrate qualities that establish rapport and enhance a client-centered therapeutic relationship.

### The Health Care System and Rehabilitation (OPA118) (2 credits)

This course introduces students to the Canadian health care system and Physiotherapy and Occupational Therapy. It promotes an understanding of the diversity of roles and interprofessional relationships of various health professionals. Students explore the roles of professional associations and the regulatory bodies of Occupational Therapists and Physiotherapists. Models of health care delivery and key elements of interprofessional health care teams are discussed. Students will also identify ethical and legal issues that impact rehabilitative medicine.

#### Lifespan Development (PSY120) (3 credits)

The purpose of this lifespan development course is to examine the interrelationship of the biopsychosocial aspects of ages and stages from birth to late adulthood. Developmental psychology is the study of the processes that shape human development. The goals of studying life span development are description, explanation and optimization of human development throughout a persons entire life. Students will study the interaction between cultural, social and historical impacts and biological maturation to gain a holistic understanding of human development. In addition, to studying human development in a systematic way, students will gain a personal understanding of their own lives in the context of lifespan development.

#### Semester 2

#### Applied Human Movement (OPA107) (3 credits)

This course will consolidate and expand the students knowledge base of human anatomy and human movement. Using a regional anatomy approach, students will focus on joint structure and function as well normal and abnormal human movement throughout the lifespan. The student will explore abnormal movement patterns, posture and gait, as well as underlying principles of soft tissue mobility. The course prepares the student for the clinical application of practice considerations of motor learning and skill acquisition.

#### Physical Agents (OPA109) (3 credits)

This purpose of this course is to provide the student with the opportunity to develop the ability required to safely and effectively apply therapeutic modalities used in physiotherapy and occupational therapy. The student will be expected to demonstrate competence in the areas of safety, patient and equipment set up and implementation of specific therapeutic modalities, as well as effective instruction, cuing and providing feedback of the client. The student will also be expected to demonstrate knowledge and accuracy regarding surface anatomy as it relates to the application of therapeutic modalities. The student will demonstrate the ability to perform aspects of documentation of the application of therapeutic modalities within the scope of the OTA and/or PTA.

#### Physiotherapy Clinical Skills I (OPA110) (3 credits)

The purpose of this course is to provide the student with the ability to perform basic skills performed by a Physiotherapist Assistant. The student is introduced to essential competencies related to handling skills, therapeutic exercise, measurement of joint motion, bed mobility, transfers and assistive ambulation. The student will be expected to demonstrated competence in areas of safety, guarding, handling skills, set up and fit of assistive devices, as well as effective instruction, cuing and providing feedback to the client.

#### Occupational Therapy Principles and Clinical Skills I (OPA115) (6 credits)

The purpose of this course is to provide the student with the opportunity to learn basic skills performed by an Occupational Therapy Assistant. The OT assessment process will be explored. Students will understand

the clinical presentation and management of neurological conditions and the appropriate Occupational Therapy interventions. Purposeful activity as a therapeutic intervention will emphasized. Students will understand training in Activities of Daily Living (ADL) and the use of assistive devices/adaptive equipment to facilitate and encourage safety and increased independence with functioning. The student will be expected to demonstrate competence in the areas of transfers and handling skills. Lab sessions will provide students with an opportunity to practice therapeutic interventions, remedial exercises and training in the use of compensatory aids/strategies. Effective communication during instruction, cuing and when providing feedback to the client will be expected.

# Clinical Pathology I (OPA130) (3 credits)

The purpose of this course is to introduce the student to the clinical presentation of common disabling conditions which are managed by Occupational Therapy and Physiotherapy. The conditions emphasized will be mainly neurological, cardiorespiratory and/or endocrine in nature. Relevant anatomy/physiology will be reviewed and/or taught prior to the student gaining familiarity with the clinical presentation of the conditions, the associated relevant pathology, and the general goals of intervention of Physiotherapy and/or Occupational Therapy.

# Fieldwork Practicum II (OPA131) (5 credits)

This course provides the student with their initial fieldwork experience where they practice demonstrating professional behaviours and communication skills required in the workplace. The student will gain experience with various client populations and conditions. Application of skills and concepts is at the discretion of the fieldwork supervisor and dependent on the nature of the fieldwork experience. Through a weekly seminar, the student will a deeper understanding of the role of the OTA/PTA and their present role as a student OTA/PTA.

### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 3

# Physiotherapy Clinical Skills II (OPA203) (3 credits)

This course will enable the student to develop critical thinking skills required to implement, monitor and progress a treatment plan as prescribed by and under the supervision of a Registered Physiotherapist. Exploring a variety of clinical conditions/cases, the student will develop essential competencies required in the role of a PTA to safely and efficiently support the physiotherapist. Labs will focus on the application of therapeutic exercise, handling skills and facilitation of ambulation, bed mobility, transfers, and the physiotherapy management of respiratory conditions. Students will gain familiarity with standardized tests including, but not limited to the Berg Balance test, the Timed Up and Go test and the Functional Reach test.

#### Occupational Therapy Clinical Skills II (OPA204) (3 credits)

The purpose of this course is to provide the student with knowledge and skills required by an OTA. The emphasis will be on rehabilitation of musculoskeletal conditions. The student will demonstrate safe handling, positioning and transfer techniques. The use of assistive devices, splints and technology used to maximize independent function will be explored. In addition to joint range of motion and muscle

strengthening; joint protection and work simplification will be covered. The student will become familiar with ADL/IADL training, accessibility issues and vocational rehabilitation.

### Mental Health Conditions & Psychosocial Issues (OPA214) (3 credits)

The purpose of this course is to introduce the student to common mental health conditions and related psychosocial issues. The student will become familiar with pediatric, adolescent and adult conditions addressed by the OT or PT, either as a primary or secondary diagnosis. Medical intervention and rehabilitative strategies and techniques will be discussed. The role of the OTA & PTA in providing therapeutic intervention will be covered. Opportunities for interaction with local community mental health resources and facilities will be provided.

#### Clinical Pathology II (OPA216) (3 credits)

The purpose of this course is to introduce the student to the clinical presentation of common disabling conditions which are managed by Occupational Therapy and Physiotherapy. The conditions emphasized will be mainly musculoskeletal, integumentary and immunological in nature. Relevant anatomy/physiology will be reviewed and/or taught prior to the student gaining familiarity with the conditions, the associated relevant pathology, and the general goals of intervention of Physiotherapy and/or Occupational Therapy.

#### Fieldwork Practicum III (OPA217) (5 credits)

This course will prepare the student to become a skilled practitioner who supports the Registered Occupational Therapist and Physiotherapist in the provision of assigned services. Through participation in fieldwork and reflection activities, the student will consolidate prior learning as well as acquire new knowledge and skills in the workplace. The goals of this experience are to provide the student with the opportunity to practice direct and indirect patient care skills and to develop high standards of professional behaviour. In fieldwork settings and also in the Sault College Health Sciences Simulation Lab, students will begin to develop critical thinking and problem solving skills to enhance their knowledge and clinical competence. A Registered Occupational Therapist or Physiotherapist supports the student during this practicum experience and facilitates a weekly seminar to promote a deeper understanding of the role of the OTA & PTA within the inter-professional health care team.

#### Interpersonal Communication in Rehabilitation II (OPA218) (3 credits)

This course will provide the student opportunities to enhance essential interpersonal skills required to be an effective member of an inter-disciplinary health care team. It will enable the student to integrate and apply concepts covered in Interpersonal Communication in Rehabilitation I. Students will be encouraged to respect diversity and recognize the importance of cultural sensitivity. Strategies to communicate effectively and manage conflict during challenging situations with clients and colleagues will be discussed and practiced. Interpersonal skills necessary for effective group interaction with clients will be explored. Leadership and advocacy skills relevant to the field of rehabilitation will also be explored. The student will practice communication skills necessary to become an effective inter-professional health care team member. Opportunities will be provided through role playing, reflective learning activities and interactions during concurrent fieldwork placements.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 4

# Clinical Case Studies (OPA208) (6 credits)

This course will provide the student with the opportunity to integrate and consolidate the theory and practice of managing complex patient situations in a problem based learning environment. Various

physical, cognitive, psyco-social and cultural issues will be explored. The student will utilize critical thinking skills required to determine a patients needs in order to appropriately implement components of a treatment plan as prescribed by and under the supervision of an Occupational Therapist and/or a Physiotherapist. The importance of the interdisciplinary health care team will be explored.

# Documentation Skills for the OTA/PTA (OPA209) (2 credits)

The purpose of this course is to prepare the student for the documentation responsibilities of the OTA/PTA. It will prepare them for their fieldwork experiences by providing them with the necessary skills to read medical charts and documents and to document appropriately in medical charts/files. Documentation practice takes place in the classroom and during fieldwork experiences.

# Professional Topics in Rehabilitation (OPA211) (1 credits)

The purpose of this course is to enhance awareness and development of professionalism to prepare for competent entry into the field of rehabilitation. Included is a review of professional topics covered in the first three semesters with application to clinical fieldwork experiences and opportunities. The students will be expected to provide evidence and demonstrate professional behaviours such as dependability, accountability, initiative and organization. Professional issues such as the scope of practice, the use of title (OTA/PTA) and the role of the professional colleges and associations will be reviewed. In addition, the student will demonstrate and reflect on the importance of ethical standards and how individual and professional ethics impact professional behaviours and clinical reasoning skills. Resources and skills required for successful entry into the workplace will be explored, including effective cover letter and resume writing and interviewing skills.

# Fieldwork Practicum IV (OPA226) (10 credits)

This course will provide the student with a Physiotherapy fieldwork placement which is required as partial fulfillment of the OTAPTA diploma. During fieldwork placement, the student will consolidate prior learning, under the supervision of an Physiotherapist. The student will be encouraged to refine and practice role enhancing skills and demonstrate effective interpersonal skills, competent clinical skills and professionalism. Reflective practice will be emphasized to enhance the learning opportunity and promote lifelong learning. The goal is to provide the student opportunities to reliably demonstrate the ability to perform within the scope of practice of an entry level Physiotherapist Assistant.

# Fieldwork Practicum V (OPA227) (10 credits)

This course will provide the student with an Occupational Therapy fieldwork placement which is required as partial fulfillment of the required fieldwork hours for successful completion of the OTA & PTA Diploma. During fieldwork placement, the student will consolidate prior learning, under the supervision of an Occupational Therapist. The student will be encouraged to refine and practice role enhancing skills and demonstrate effective interpersonal skills, competent clinical skills and professionalism. Reflective practice will be emphasized to enhance the learning opportunity and promote lifelong learning. The goal is to provide the student opportunities to reliably demonstrate the ability to perform within the scope of practice of an entry level Occupational Therapist Assistant.

# Communication Disorders in Rehabilitation (OPA228) (2 credits)

This course will provide the student with an understanding role of the Speech Language Pathologist. The management of disorders of communication, speech language and swallowing will be emphasized. It will introduce the student to strategies that will assist them in their role as an OTA/PTA managing individuals with communication disorders and dysphagia. The student will be also be introduced to augmentative/assistive communication devices commonly used as well as appropriate application of these

devices.

# Personal and Developmental Support Services

Section B.102 6/2/2020

**Ontario College Diploma (2 Years - 4 Semesters ) (3070)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

The Personal and Developmental Support Services program at Sault College will prepare you for the various challenges and experiences that are part of the expanding health care and community settings. The faculty and staff at Sault College are ready to assist you in preparation to become a successful graduate in these dynamic environments. The Personal and Developmental Support Services program is based upon various components: the person, health, caring, holistic wellness, respect, inclusivity, and support work. These components will prepare you for the role of assisting clients and families to achieve and maintain an optimal quality of life. To reflect these beliefs, Sault College has developed a holistic and evidence-based program that incorporates the required knowledge, theory, values, and hands on skills to be successful within the various settings in healthcare and the community. When you have completed the Personal and Developmental Support Services program at Sault College, you will be able to work with clients across the lifespan in settings such as long term care facilities, hospitals, private agencies, retirement homes, home care settings, boards of education (special needs children), palliative care settings, senior citizen recreation centres, respite settings, and group homes. This program will provide you with a lifelong and rewarding career. Some students choose to use it as a foundation to further their learning.

1. Work within the personal and developmental support services role in a variety of healthcare and community settings in accordance with all applicable legislation and employer's job description, policies, procedures and guidelines.

2. Conduct oneself in an ethical, competent and accountable manner in all professional relationships.

3. Provide person-directed and centred support that is sensitive to diverse values, cultures, beliefs and needs to promote client self-motivation and self-integration while maintaining privacy and confidentiality.

4. Assess, communicate and document relevant client information in accordance with employer's policies and procedures and all applicable legislation within the personal and developmental support services role.

5. Participate and collaborate as a member of the interprofessional team to promote a safe and comfortable environment for clients across the lifespan demonstrating the responsibility to identify and report situations of neglect or abuse (actual or potential), and respond in accordance with all applicable legislations and employer's policies and procedures.

6. Support the health and well-being of clients across the lifespan by applying basic knowledge of growth and development, common alterations in functioning, disease prevention, health promotion and maintenance, rehabilitation and restorative care.

7. Assist clients with medication\* in keeping with the direction of the plan of care/service plan\* and under the direction and monitoring of a regulated health professional\* or most accountable person\* and in accordance with all applicable legislation and employer's policies.

8. Assist clients who are caring for dependent individuals\* considering client and family choices, professional\* boundaries and the direction of the plan of care/service plan\*.

9. Assist in the provision of person-directed and centred palliative and end-of-life support for clients and their families.

10. Develop professional development plans incorporating reflective practice to enhance job performance.

### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma (OSSD) or equivalent, mature student status.

Applicants, whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements. International applicants must have an IELTS Score of 6.0 with no band lower than 5.5.

# **CAREER PATHS**

Graduates can find employment in long term care facilities, hospitals, private agencies, retirement homes, home care settings, boards of education (special needs children), palliative care settings, senior citizen recreation centres, respite settings, and group homes.

### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
N/A	N/A	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

#### **EDUCATIONAL PATHS**

Applicants ladder in as graduates of Secondary School Diplomas, or from College Certificates and College Diplomas from a variety of programs such as Personal Support Worker, Pre-Health Sciences Pathway to Certificates and Diplomas, and Pre-Health Sciences Pathway to Advanced Diplomas and Degree.

Graduates of the Personal and Developmental Support Services program can ladder to College Graduate Programs or to Undergraduate Degrees from a variety of programs such as Collaborative Bachelor of Science in Nursing, Health Care Administration, and Gerontology.

# **PROGRAM OF STUDY**

#### SEMESTER 1

CMM115-3 Communications I PSW108-3 Body Structure and Function I PSW120-4 Principles of PSW Practice I PSW121-3 Health Promotion and Health Challenges I PSW123-9 PSW Practicum I HDG122-3 Personal and Academic Success Strategies

#### **SEMESTER 2**

PSW118-3 Body Structure and Function II PSW130-3 Principles of PSW Practice II PSW131-3 Health Promotion and Health Challenges II PSW133-12 PSW Practicum II

### **SEMESTER 3**

DSS300-3 Developmental Disabilities DSS301-3 Professionalism DSS302-6 Health and Wellness DSS303-3 Personal Outcome Measures and Planning DSS304-2 Technology and Documentation

### **SEMESTER 4**

DSS305-11 Practicum III DSS306-2 Positive Approaches and Community Inclusion DSS307-2 Augmentative Communication GEN100-3 Global Citizenship

# **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Body Structure and Function I (PSW108) (3 credits)

This course will provide the learner with a basic understanding of the human body. The learner will identify the basic structures and functions of cells, tissues, membranes, the integumentary system, the musculoskeletal system, the nervous system, and the senses. The learner will also examine how these systems maintain homeostasis and identify some age related changes.

#### Principles of PSW Practice I (PSW120) (4 credits)

This course will introduce the learner to the health care system, the health care team and the legislative regulations that govern the role of the Personal Support Worker. The legal rights and responsibilities of both the client and the PSW will be examined. Concepts will be explored that pertain to solving problems, working within groups, and promoting effective communication. This course prepares students to interpret established nursing care plans, organize care, make appropriate observations, report and document.

#### Health Promotion and Health Challenges I (PSW121) (3 credits)

This course will introduce the learner to the theoretical concepts of health promotion, health practices, human needs, and growth and development throughout the lifespan. Understanding of these concepts will provide the learner with knowledge to develop helping relationships, provide culturally-sensitive care, and provide optimum support for clients based on the clients unique needs. An introduction to caring for individuals and families who are experiencing ongoing health challenges is included in the course with

emphasis on vision, hearing, and aphasia.

#### PSW Practicum I (PSW123) (9 credits)

This course will provide the learner with opportunities to apply the concepts and knowledge acquired in the classroom/lab environment to the practice setting. The emphasis will be on meeting the needs of clients. The learner will practice basic care skills in the laboratory setting and provide holistic care to clients residing in long-term care facilities. Medical terminology and standard abbreviations will be studied independently to enhance communication within the health care delivery system.

# Personal and Academic Success Strategies (HDG122) (3 credits)

This course will prepare you for the rigors of academic life and enable you to develop a personal profile for college and career success. The main focus of this course will include accepting personal responsibility, discovering self-motivation, mastering self-management, employing interdependence, gaining self-awareness, adopting lifelong learning, and developing emotional intelligence. In addition, you will develop and produce a `Personal Profile` that will identify your personal learning style, communication style, and personality style to enable you to achieve success in learning about, understanding, and choosing the courses and careers that will lead to personal and professional satisfaction.

### Semester 2

### Body Structure and Function II (PSW118) (3 credits)

This course is a continuation of Body Structure and Function I (PSW108) in which the learner will examine the remaining body systems and how they maintain homeostasis. The learner will identify the basic structures and functions of the endocrine, circulatory, lymphatic, immune, respiratory, digestive, and urinary systems. Reproduction and human growth and development will also be studied.

### Principles of PSW Practice II (PSW130) (3 credits)

This course will introduce the learner to the responsibilities related to the role of the PSW in home management, emergency care, and end-of-life care. This course will also explore abuse, caring for the young, the surgical client, and will discuss job search skills to prepare students to enter the workforce. Medical terminology and standard abbreviations will continue to be utilized to enhance communication within the health care delivery system.

#### Health Promotion and Health Challenges II (PSW131) (3 credits)

This course will continue to introduce the learner to the holistic care of individuals and families experiencing ongoing physical, cognitive, and mental health challenges. The role of the PSW in rehabilitative and restorative care will be examined along with holistic care of clients with various health conditions.

# PSW Practicum II (PSW133) (12 credits)

This course will provide the learner with opportunities to apply the concepts and knowledge acquired in the classroom environment to the practice setting. The emphasis will be on meeting the needs of clients. The learner will practice skills in the laboratory setting and work within the role of a PSW in a community agency to provide holistic care to clients residing in various agency settings and, in addition, address private home care needs. These experiences will provide the learner with the opportunity to consolidate skills and knowledge at a level of a graduating PSW.

#### Semester 3

#### **Developmental Disabilities** (DSS300) (3 credits) Through this course, students will learn about the history and evolution of Developmental Services in

Ontario. They will be provided with an overview of current supports and services provided provincially. Current trends in the developmental services sector will be discussed. Mission and vision statements, values and organizational goals and priorities will be reviewed from the Community Living Agency, as an example of a service provider. The course will focus on sharing information about specific diagnoses, dual-diagnosis and aging.

#### Professionalism (DSS301) (3 credits)

This course will identify standards regarding verbal and written communication skills with an emphasis placed on the use of respectful language. Key characteristics of strong interpersonal skills, healthy boundaries, and effective team-building will be examined. Students will learn how to build positive relationships with families and community partners. Professional growth and development goals will be identified through core competencies for developmental services. The philosophy of support will be studied. Teaching/Learning theories and strategies will be explored.

# Health and Wellness (DSS302) (6 credits)

This course takes an in-depth look at the Ministry of Community and Social Services quality assurance measures with an emphasis on abuse awareness; prevention; and reporting requirements. Medication administration, policies and procedures, pharmacology and documentation will be reviewed. Successful completion of a Medication Administration Test will be required. Safe lifts and transfers for children and young adults will be reviewed. Students will learn non-violent crisis resolution skills in this course.

# Personal Outcome Measures and Planning (DSS303) (3 credits)

Through this course, students will be introduced to the definition and measurement of quality of life for people with developmental disabilities through a review of Personal Outcome Measures identified by The Council on Quality and Leadership. Improving quality of life through person-centered planning and goal setting will be examined. Students will learn about Individual Support Plans and create their own One Page Profiles. Human Rights and the Rights Review process will be discussed. The importance of financial plans identifying supports in place to assist with management and safeguards of personal finances will also be shared.

# Technology and Documentation (DSS304) (2 credits)

In this course, students will have an opportunity to review basic computer skills. Laws, policies and procedures regarding privacy and confidentiality will be reviewed. Students will be introduced to documentation skills and various data management systems.

#### Semester 4

# Practicum III (DSS305) (11 credits)

Students will be provided with the opportunity to spend time with a 1:1 staff mentor and gain valuable hands-on experience through different agencies, such as Community Living. This will allow the application of theoretical knowledge gained through the other courses. It is also very important to gain an understanding of the role that support staff play in the lives of people with developmental disabilities. Students will come together for seminar discussions and to share experiences.

# Positive Approaches and Community Inclusion (DSS306) (2 credits)

Supporting people to share their strengths, gifts and capacities with their community is an important role of staff in developmental services. In this course, students will become familiar with Positive Approaches, the detrimental impact of social isolation and the importance of belonging. Students will learn about fostering independence, building social capital and discussing values and ethics in supporting people to have real lives. Course work will also include a focus on building capacity in advocating for others.

#### Augmentative Communication (DSS307) (2 credits)

This course will introduce students to the field of communication and specifically augmentative communication. Students will learn how to: understand, analyze, synthesize and evaluate the variables which affect the individuals who communicate using complex methods or assistive technology.

#### **Global Citizenship** (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Personal Support Worker

**Ontario College Certificate (1 Year - 2 Semesters ) (3027)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

The Personal Support Worker Program at Sault College will prepare you for the various challenges and experiences that are part of the expanding health care setting. The faculty and staff at Sault College are ready to assist you in preparation to become a successful graduate in this growing and exciting environment.

The Personal Support Worker Program is based upon various components: the client, health, caring, holistic wellness, and support work. These components will prepare you for the role of assisting clients and families to achieve and maintain optimal health. To reflect these beliefs, Sault College has developed a holistic and evidence based program that incorporates the required knowledge, theory, values, and hands on skills to be successful within the various settings of healthcare. When you have completed the Personal Support Worker program at Sault College, you will be able to work with clients across the lifespan in settings such as long term care facilities, hospitals, private agencies, retirement homes, home care settings, boards of education (special needs children), palliative care settings, senior citizen recreation centres, respite settings, and group homes.

This program will provide you with a lifelong and rewarding career in healthcare. Some students choose to use it as a foundation to further their learning.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

# A graduate of the Personal Support Worker Program at Sault College will reliably demonstrate the ability to:

- 1. Work within the personal support worker role in community, retirement homes, long-term care homes and/or hospital care settings in accordance with all applicable legislation and employer's job description, policies, procedures and guidelines.
- 2. Act responsibly and be accountable for own actions while recognizing the boundaries of knowledge and skills within the personal support worker role that require collaboration with the clients, families, supervisors and/or other members of the interprofessional care/service team.
- 3. Participate as a member of the interprofessional care/service team and maintain collaborative working relationships in the provision of supportive care in community, retirement homes, long-term care homes and/or hospital care settings.
- 4. Provide client-centred and client-directed care that is based on ethical principles, sensitive to diverse client and family values, beliefs and needs, and which follows the direction of the plan of care/service plan.
- 5. Establish and maintain helping relationships with clients and their families reflecting open communication, professional boundaries, employer's policies and adhering to confidentiality and privacy legislation.

- 6. Identify relevant client information using basic assessment and communication skills and report and document findings in accordance with the requirements of employer policies and procedures and all applicable legislation.
- 7. Promote and maintain a safe and comfortable environment for clients, their families, self and others including the implementation of infection prevention and control measures and emergency first aid procedures that are in keeping with the plan of care/service plan, employer policies and procedures, and all applicable legislation.
- 8. Assist clients across the lifespan with routine activities of daily living by applying basic knowledge of growth and development, common alterations in functioning, disease prevention, health promotion and maintenance, rehabilitation and restorative care.
- 9. Assist clients with medication in keeping with the direction of the plan of care/service plan and under the direction and monitoring of a regulated health professional or most accountable person and in accordance with all applicable legislation and employer's policies.
- 10. Assist with household management tasks and instrumental activities of daily living in accordance with the plan of care/service plan and considering the preferences, comfort and safety of clients, families and significant others.
- 11. Assist clients who are caring for dependent individuals considering client and family choices, professional boundaries and the direction of the plan of care/service plan.
- 12. Identify and report situations of neglect, and potential, alleged or witnessed/actual incidents of abuse, and respond in accordance with all applicable legislation and employer's policies and procedures.
- 13. Assist in the provision of culturally relevant palliative and end-of life care to clients experiencing life threatening illness and to their families and significant others, from diagnosis through death and bereavement, and in accordance with clients choices and the plan of care/service plan.
- 14. Use identified approaches and best practices to support positive and safe behaviour in clients experiencing cognitive impairment, mental health challenges and/or responsive behaviours.

#### Reference

Ministry of Training, Colleges and Universities Personal Support Worker Program Standards (MTCU 41469, July 2014)

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

To enter the Personal Support Worker program, you'll need to have Ontario Secondary School diploma with Grade 12 English (C) ENG4C or mature student status.

A mature student is someone who is 19 years of age or older by the first day of College and has not graduated from high school. If you have graduated from high school but haven't been to school in a while, you're an adult learner.

If you're a mature student, you can still apply to College, and have two options: You can pay \$25 to write the Canadian Academic Achievement Test (CAAT) for Math and/or English requirements only or you can take Academic Upgrading for free to get your high school equivalency for any of our college programs.

If you're an adult learner that, is, have graduated from high school and have been out of school for a while, you still may want to consider free Academic Upgrading to re-fresh your skills before the start of the Personal Support Worker program. Upgrading programs start at the beginning of each month. Call 705-759-2554 ext., 2433 to learn more.

#### ACADEMIC RECOMMENDATIONS

We really want you to make the best choice possible and make a decision that's right for you.

Before deciding to study to become a Personal Support Worker, please give us a call to talk about what working in this field will be like.

That way, you'll know exactly what your future will look like.

We can talk with you over the phone, tour you around the facilities and classrooms, or invite you to sit in on a class.

Call Lori Bertrand, Program Coordinator for PSW at 705.759.2554, ext. 2640 or by email at **lori.bertrand@saultcollege.ca** to learn more about a future as a Personal Support Worker.

# **CAREER PATHS**

The staff and faculty are committed to providing an academic environment that will help you achieve personal and professional success. When you have completed the Personal Support Program here at Sault College you will be able to work in various settings such as long-term care facilities, hospitals, community agencies, and various other settings offering opportunities to work with various age groups.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **DRESS CODE**

The public we serve and the institutions with which we share contractual agreements expect a neat and well-groomed appearance of the Personal Support Worker student. A professional image communicates respect, caring and inspires confidence and trust with our clients and others.

It is expected that Sault College Personal Support Worker students will follow a dress code when in labs/clinical placements and also adhere to the policies of the agencies they will be placed in.

# **CLINICAL/LAB OR FIELD PLACEMENTS**

Throughout the program, you will gain valuable experience in your practicum placements. You will be working with clients and families in a variety of settings and circumstances. Further, you will have many opportunities to make a positive difference in their lives.

To be able to attend these practicum experiences, you'll need to complete the requirements listed below

and bring in documents to support completion prior to starting your practicum placement. This is necessary to have in place before practicum starts as planning begins several weeks in advance. Having your requirements completed ensures that you are able to gain the experience needed to meet the course outcomes successfully.

- 1. Standard 1st Aid Certificate (current within 3 years)
- 2. CPR (Health Care Provider or Basic Life Support Level) Certificate (yearly recertification required)
- 3. WHMIS Certificate (current within one year)

4. N95 Mask Fit Testing Card (renew every 2 years). Successful mask fit testing requires a **clean shaven face** (minimal facial hair) to administer the test.

### 5. Immunization & Health Record

• A complete College Health Form along with official immunization documentation must be submitted?to the College Health Centre. Contact your health care provider, medical clinic or in Sault Ste. Marie and District, Algoma Public Health if you need to update your immunization record.

#### Documentation of the following is required:

- proof of a 2-step Mantoux test for tuberculosis. For a known positive test, you must be assessed by a physician and receive medical documentation to have access to placement (a chest x-ray is required). If a 2-step was completed over a year ago; a 1 step TB test is required.
- proof of measles, mumps and rubella immunization
- proof of tetanus/diphtheria immunization
- proof of chicken pox immunization
- Influenza immunization each October/November of the program. The flu vaccine is not mandatory however in the event that a student refuses the vaccine, the student must follow placement agency policies. This may mean removal from clinical placement for the duration of an influenza outbreak. Students can contact their coordinator if they have any questions.
- **NOTE:** Hepatitis B vaccination is not mandatory but strongly recommended.

#### **Criminal Record Check with Vulnerable Sector Search**

- This document is mandatory for agencies to grant access to vulnerable persons. You will be given detailed information about obtaining a current Criminal Record Check during the first month of classes or when clinical placements are confirmed. (Note: If a criminal record exists or charges are pending, you are required to disclose this information to the Chair of the Health Programs before the start of your program.)
- Criminal Record Check with Vulnerable Sector Search is a yearly requirement that must be updated annually.

All costs associated with these requirements are the responsibility of the student.

You will also sign a Statement of Confidentiality Form.

#### Notice to International Students:

- The necessary immunizations for your program can be obtained from your home country and you will need to submit those immunization records along with the College Health Form to the Sault College Health Centre.?
- All other requirements (Standard First Aid, CPR, WHMIS, N95 Mask Fit, Criminal Record Check with Vulnerable Sector Search) must be obtained and completed after your arrival in Ontario.

• As per Canadian Immigration policy, all International students completing a program with a practicum (field/clinical placement) component must obtain a Coop/Work Permit from Immigration, Refugees and Citizenship Canada stating that they are permitted to attend practicum as in integral part of their studies.? International students will not be able to attend placement without submitting this permit for verification.

For further information regarding clinical and field placement requirements for this program, please contact Lori Zuccato either by email: <u>lori.zuccato@saultcollege.ca</u> or by phone: 705-759-2554 ext. 2693.

# **OTHER INFORMATION**

September, January, and May intakes are available for this program.

The Personal Support Worker program gives you a strong foundation for going on in the health care field of study if you would like to further your education.

After graduating successfully from the program, you can work part-time on week-ends and evenings as a Personal Support Worker at a competitive wage to help pay with your education while going on in school.

To go on to become a Practical Nurse after graduating from the Personal Support Worker program, you will still need two additional courses: Grade 12 Chemistry (C) SCH4C and Grade 11 Foundations for College Math (C) MBF3C to enter the Practical Nursing program.

Both of these are offered through our free Academic Upgrading program and can be done simultaneously if you choose while taking the Personal Support Program. Call 705.759.2554, ext. 2433 to learn more about taking these courses.

If you successfully complete both PSW108 and PSW118 while studying in the Personal Support Worker program, those will be accepted for Grade 11 Biology (C) SBI3C, which is required for the Practical Nursing program. You will also be exempted from the Medical Terminology portion of Practical Nursing if you have completed Medical Terminology in the Personal Support Worker or within the Continuing Education Program.

For more information about continuing on in your studies in health care, please call Lori Bertrand, Program Coordinator for PSW at 705.759.2554, ext. 2640 or by email at <u>lori.bertrand@saultcollege.ca</u>.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I PSW108-3 Body Structure and Function I PSW120-4 Principles of PSW Practice I PSW121-3 Health Promotion and Health Challenges I PSW123-9 PSW Practicum I

### SEMESTER 2

PSW118-3 Body Structure and Function II PSW130-3 Principles of PSW Practice II PSW131-3 Health Promotion and Health Challenges II PSW133-12 PSW Practicum II

#### **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Body Structure and Function I (PSW108) (3 credits)

This course will provide the learner with a basic understanding of the human body. The learner will identify the basic structures and functions of cells, tissues, membranes, the integumentary system, the musculoskeletal system, the nervous system, and the senses. The learner will also examine how these systems maintain homeostasis and identify some age related changes.

#### Principles of PSW Practice I (PSW120) (4 credits)

This course will introduce the learner to the health care system, the health care team and the legislative regulations that govern the role of the Personal Support Worker. The legal rights and responsibilities of both the client and the PSW will be examined. Concepts will be explored that pertain to solving problems, working within groups, and promoting effective communication. This course prepares students to interpret established nursing care plans, organize care, make appropriate observations, report and document.

#### Health Promotion and Health Challenges I (PSW121) (3 credits)

This course will introduce the learner to the theoretical concepts of health promotion, health practices, human needs, and growth and development throughout the lifespan. Understanding of these concepts will provide the learner with knowledge to develop helping relationships, provide culturally-sensitive care, and provide optimum support for clients based on the clients unique needs. An introduction to caring for individuals and families who are experiencing ongoing health challenges is included in the course with emphasis on vision, hearing, and aphasia.

#### PSW Practicum I (PSW123) (9 credits)

This course will provide the learner with opportunities to apply the concepts and knowledge acquired in the classroom/lab environment to the practice setting. The emphasis will be on meeting the needs of clients. The learner will practice basic care skills in the laboratory setting and provide holistic care to clients residing in long-term care facilities. Medical terminology and standard abbreviations will be studied independently to enhance communication within the health care delivery system.

#### Semester 2

#### Body Structure and Function II (PSW118) (3 credits)

This course is a continuation of Body Structure and Function I (PSW108) in which the learner will examine the remaining body systems and how they maintain homeostasis. The learner will identify the basic structures and functions of the endocrine, circulatory, lymphatic, immune, respiratory, digestive, and urinary systems. Reproduction and human growth and development will also be studied.

#### Principles of PSW Practice II (PSW130) (3 credits)

This course will introduce the learner to the responsibilities related to the role of the PSW in home management, emergency care, and end-of-life care. This course will also explore abuse, caring for the young, the surgical client, and will discuss job search skills to prepare students to enter the workforce.

Medical terminology and standard abbreviations will continue to be utilized to enhance communication within the health care delivery system.

### Health Promotion and Health Challenges II (PSW131) (3 credits)

This course will continue to introduce the learner to the holistic care of individuals and families experiencing ongoing physical, cognitive, and mental health challenges. The role of the PSW in rehabilitative and restorative care will be examined along with holistic care of clients with various health conditions.

#### PSW Practicum II (PSW133) (12 credits)

This course will provide the learner with opportunities to apply the concepts and knowledge acquired in the classroom environment to the practice setting. The emphasis will be on meeting the needs of clients. The learner will practice skills in the laboratory setting and work within the role of a PSW in a community agency to provide holistic care to clients residing in various agency settings and, in addition, address private home care needs. These experiences will provide the learner with the opportunity to consolidate skills and knowledge at a level of a graduating PSW.

# Personal Support Worker - (Full Time - Contact North)

Section B.104 6/2/2020

**Ontario College Certificate (1 Year - 2 Semesters ) (3038)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

The Personal Support Worker Program is based upon various components: the client, health, caring, holistic wellness, and support work. These components will prepare you for the role of assisting clients and families to achieve and maintain optimal health. To reflect these beliefs, Sault College has developed a holistic and evidence based program that incorporates the required knowledge, theory, values, and hands on skills to be successful within the various settings of healthcare. When you have completed the Personal Support Worker program at Sault College, you will be able to work with clients across the lifespan in settings such as long term care facilities, hospitals, private agencies, retirement homes, home care settings, boards of education (special needs children), palliative care settings, senior citizen recreation centres, respite settings, and group homes.

This program will provide you with a lifelong and rewarding career in healthcare. Some students choose to use it as a foundation to further their learning.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

A graduate of the Personal Support Worker Program at Sault College will reliably demonstrate the ability to:

- 1. Work within the personal support worker role in community, retirement homes, long-term care homes and/or hospital care settings in accordance with all applicable legislation and employer's job description, policies, procedures and guidelines.
- 2. Act responsibly and be accountable for own actions while recognizing the boundaries of knowledge and skills within the personal support worker role that require collaboration with the clients, families, supervisors and/or other members of the interprofessional care/service team.
- 3. Participate as a member of the interprofessional care/service team and maintain collaborative working relationships in the provision of supportive care in community, retirement homes, long-term care homes and/or hospital care settings.
- 4. Provide client-centred and client-directed care that is based on ethical principles, sensitive to diverse client and family values, beliefs and needs, and which follows the direction of the plan of care/service plan.
- 5. Establish and maintain helping relationships with clients and their families reflecting open communication, professional boundaries, employer's policies and adhering to confidentiality and privacy legislation.
- 6. Identify relevant client information using basic assessment and communication skills and report and document findings in accordance with the requirements of employer policies and procedures and all applicable legislation.
- 7. Promote and maintain a safe and comfortable environment for clients, their families, self and others including the implementation of infection prevention and control measures and emergency first aid

procedures that are in keeping with the plan of care/service plan, employer policies and procedures, and all applicable legislation.

- 8. Assist clients across the lifespan with routine activities of daily living by applying basic knowledge of growth and development, common alterations in functioning, disease prevention, health promotion and maintenance, rehabilitation and restorative care.
- 9. Assist clients with medication in keeping with the direction of the plan of care/service plan and under the direction and monitoring of a regulated health professional or most accountable person and in accordance with all applicable legislation and employer's policies.
- 10. Assist with household management tasks and instrumental activities of daily living in accordance with the plan of care/service plan and considering the preferences, comfort and safety of clients, families and significant others.
- 11. Assist clients who are caring for dependent individuals considering client and family choices, professional boundaries and the direction of the plan of care/service plan.Identify and report situations of neglect, and potential, alleged or witnessed/actual incidents of abuse, and respond in accordance with all applicable legislation and employer's policies and procedures.
- 12. Assist in the provision of culturally relevant palliative and end-of life care to clients experiencing life threatening illness and to their families and significant others, from diagnosis through death and bereavement, and in accordance with clients choices and the plan of care/service plan.
- 13. Use identified approaches and best practices to support positive and safe behaviour in clients experiencing cognitive impairment, mental health challenges and/or responsive behaviours.

#### Reference

Ministry of Training, Colleges and Universities Personal Support Worker Program Standards (MTCU 41469, July 2014)

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

We really want you to make the best choice possible and make a decision that's right for you.

Before deciding to study to become a Personal Support Worker, please give us a call to talk about what working in this field will be like.

That way, you'll know exactly what your future will look like.

We can talk with you over the phone, tour you around the facilities and classrooms, or invite you to sit in on a class.

# **CAREER PATHS**

The staff and faculty are committed to providing an academic environment that will help you achieve personal and professional success. When you have completed the Personal Support Program here at Sault College you will be able to work in various settings such as long-term care facilities, hospitals, community agencies, and various other settings offering opportunities to work with various age groups.

#### **DRESS CODE**

The public we serve and the institutions with which we share contractual agreements expect a neat and well-groomed appearance of the Personal Support Worker student. A professional image communicates respect, caring and inspires confidence and trust with our clients and others.

It is expected that Sault College Personal Support Worker students will follow a dress code when in labs/clinical placements and also adhere to the policies of the agencies they will be placed in.

# **CLINICAL/LAB OR FIELD PLACEMENTS**

Sault College's priority will always be to try to find a suitable Field Placement in your home community.

Throughout the program, you will gain valuable experience in your practicum placements. You will be working with clients and families in a variety of settings and circumstances. Further, you will have many opportunities to make a positive difference in their lives.

To be able to attend these practicum experiences, you'll need to complete the requirements listed below and bring in documents to support completion prior to starting your practicum placement. This is necessary to have in place before practicum starts as planning begins several weeks in advance. Having your requirements completed ensures that you are able to gain the experience needed to meet the course outcomes successfully.

- 1. Standard 1st Aid Certificate (current within 3 years)
- 2. CPR (Health Care Provider or Basic Life Support Level) Certificate (yearly recertification required)
- 3. WHMIS Certificate (current within one year)

4. N95 Mask Fit Testing Card (renew every 2 years). Successful mask fit testing requires a **clean shaven face** (minimal facial hair) to administer the test.

5. Immunization & Health Record

• A complete College Health Form along with official immunization documentation must be submitted it to the College Health Centre. Contact your health care provider, medical clinic or in Sault Ste. Marie and District, Algoma Public Health if you need to update your immunization record.

#### Documentation of the following is required:

- proof of a 2-step Mantoux test for tuberculosis. For a known positive test, you must be assessed by a physician and receive medical documentation to have access to placement (a chest x-ray is required). If a 2-step was completed over a year ago; a 1 step TB test is required.
- proof of measles, mumps and rubella immunization
- proof of tetanus/diphtheria immunization
- proof of chicken pox immunization
- Influenza immunization each October/November of the program. The flu vaccine is not mandatory however in the event that a student refuses the vaccine, the student must follow placement agency policies. This may mean removal from clinical placement for the duration of an influenza outbreak. Students can contact their coordinator if they have any questions.
- **NOTE:** Hepatitis B vaccination is not mandatory but strongly recommended.

#### **Criminal Record Check with Vulnerable Sector Search**

- This document is mandatory for agencies to grant access to vulnerable persons. You will be given detailed information about obtaining a current Criminal Record Check during the first month of classes or when clinical placements are confirmed. (Note: If a criminal record exists or charges are pending, you are required to disclose this information to the Chair of the Health Programs before the start of your program.)
- Criminal Record Check with Vulnerable Sector Search is a yearly requirement that must be updated

annually.

All costs associated with these requirements are the responsibility of the student.

You will also sign a Statement of Confidentiality Form.

For further information regarding clinical and field placement requirements for this program, please contact Carla Bumbaco either by email:?<u>carla.bumbaco@saultcollege.ca</u> or by phone: 705-759-2554 ext. 2658.

### **OTHER INFORMATION**

This program is delivered off-campus through Contact North and is full-time. Beginning in Winter 2020, students are to apply to this program via <u>ontariocolleges.ca</u>.

For more information contact Carla Bumbaco, in our Continuing Education department at 705-759-2554 ext. 2658.

### **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I PSW108-3 Body Structure and Function I PSW120-4 Principles of PSW Practice I PSW121-3 Health Promotion and Health Challenges I PSW123-9 PSW Practicum I

#### **SEMESTER 2**

PSW118-3 Body Structure and Function II PSW130-3 Principles of PSW Practice II PSW131-3 Health Promotion and Health Challenges II PSW133-12 PSW Practicum II

#### **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Body Structure and Function I (PSW108) (3 credits)

This course will provide the learner with a basic understanding of the human body. The learner will identify the basic structures and functions of cells, tissues, membranes, the integumentary system, the musculoskeletal system, the nervous system, and the senses. The learner will also examine how these systems maintain homeostasis and identify some age related changes.

#### Principles of PSW Practice I (PSW120) (4 credits)

This course will introduce the learner to the health care system, the health care team and the legislative regulations that govern the role of the Personal Support Worker. The legal rights and responsibilities of both the client and the PSW will be examined. Concepts will be explored that pertain to solving problems, working within groups, and promoting effective communication. This course prepares students to interpret established nursing care plans, organize care, make appropriate observations, report and document.

### Health Promotion and Health Challenges I (PSW121) (3 credits)

This course will introduce the learner to the theoretical concepts of health promotion, health practices, human needs, and growth and development throughout the lifespan. Understanding of these concepts will provide the learner with knowledge to develop helping relationships, provide culturally-sensitive care, and provide optimum support for clients based on the clients unique needs. An introduction to caring for individuals and families who are experiencing ongoing health challenges is included in the course with emphasis on vision, hearing, and aphasia.

#### PSW Practicum I (PSW123) (9 credits)

This course will provide the learner with opportunities to apply the concepts and knowledge acquired in the classroom/lab environment to the practice setting. The emphasis will be on meeting the needs of clients. The learner will practice basic care skills in the laboratory setting and provide holistic care to clients residing in long-term care facilities. Medical terminology and standard abbreviations will be studied independently to enhance communication within the health care delivery system.

#### Semester 2

#### Body Structure and Function II (PSW118) (3 credits)

This course is a continuation of Body Structure and Function I (PSW108) in which the learner will examine the remaining body systems and how they maintain homeostasis. The learner will identify the basic structures and functions of the endocrine, circulatory, lymphatic, immune, respiratory, digestive, and urinary systems. Reproduction and human growth and development will also be studied.

#### Principles of PSW Practice II (PSW130) (3 credits)

This course will introduce the learner to the responsibilities related to the role of the PSW in home management, emergency care, and end-of-life care. This course will also explore abuse, caring for the young, the surgical client, and will discuss job search skills to prepare students to enter the workforce. Medical terminology and standard abbreviations will continue to be utilized to enhance communication within the health care delivery system.

#### Health Promotion and Health Challenges II (PSW131) (3 credits)

This course will continue to introduce the learner to the holistic care of individuals and families experiencing ongoing physical, cognitive, and mental health challenges. The role of the PSW in rehabilitative and restorative care will be examined along with holistic care of clients with various health conditions.

#### PSW Practicum II (PSW133) (12 credits)

This course will provide the learner with opportunities to apply the concepts and knowledge acquired in the classroom environment to the practice setting. The emphasis will be on meeting the needs of clients. The learner will practice skills in the laboratory setting and work within the role of a PSW in a community agency to provide holistic care to clients residing in various agency settings and, in addition, address private home care needs. These experiences will provide the learner with the opportunity to consolidate skills and knowledge at a level of a graduating PSW.

# **Practical Nursing**

Ontario College Diploma (2 Years - 4 Semesters ) (3024) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# Section B.105 6/2/2020



# **PROGRAM OVERVIEW**

The Practical Nursing Diploma Program at Sault College is currently Approved (Category 1) by the College of Nurses of Ontario (<u>www.cno.org</u>). Current graduates from this program are eligible to apply for registration as a Registered Practical Nurse in Ontario.

The Practical Nursing program philosophy is based on a set of values and beliefs about the client, health, caring, nursing and the role that teaching and learning play in enabling individuals, families and groups to achieve health outcomes. These five concepts are interrelated, interdependent and integrated throughout the curriculum. The program will provide graduates with the knowledge, skills, and values needed to demonstrate safe, competent nursing at entry-to-practice. Graduates are eligible to write the national practical nurse examination. The successful completion of this national examination entitles the candidate to apply to the College of Nurses of Ontario for registration as a practical nurse, subject to the fees and membership requirements set out by this professional organization. For more information, please contact the CNO at 1-800-387-5526.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

# A graduate of the Practical Nursing Program at Sault College will reliably demonstrate the ability to:

- 1. communicate therapeutically with clients and members of the health care team.
- 2. assess clients across the life span, in a systematic and holistic manner.
- 3. plan safe and competent nursing care, based upon a thorough analysis of available data and evidence-informed practice guidelines.
- 4. select and perform nursing interventions using clinical judgment, in collaboration with the client and, where appropriate, the health care team, that promote health and well-being, prevent disease and injury, maintain and/or restore health, promote rehabilitation, and/or provide palliation.
- 5. evaluate the outcomes resulting from all interventions in the nurse-client interaction and modify the plan of care as required.
- 6. act equitably and justly with clients and members of the health care team.
- 7. adapt to a variety of health care settings, using different leadership skills and styles as appropriate to each setting.
- 8. contribute to creating a healthy and safe work environment in a variety of health care settings.
- 9. practise in a self-regulated, professional and ethical manner, complying with relevant legislation and with the standards of both the regulatory body and the practice setting to provide safe and competent client care.

#### Reference

Ministry of Training, Colleges and Universities Practical Nursing Program Standards (MTCU 51407), December 2012.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

- Ontario Secondary School Diploma (OSSD)
- Grade 12 ENG4C
- Grade 11 Foundations for College Math (C) MBF3C
- Grade 11 Biology (C) SBI3C
- Grade 12 Chemistry (C) SCH4C or Grade 11 Chemistry (U) SCH3U

Or mature student status. Mature students must still meet all program prerequisites in the sciences.

This program has more applications than seats available. Applications will be ranked based on the average of the required courses. Beginning in September 2015 an average of 65% in the required courses will be required for applications to be considered.

Personal Support Worker is no longer a direct entry into the Practical Nursing Program.

Personal Support Worker graduates would still require:

- Grade 12 Chemistry (C) SCH4C or Grade 11 Chemistry (U) SCH3U, and
- Grade 11 Foundations for College Math (C) MBF3C

Successful completion of both PSW108 and PSW118, however, will be accepted for Grade 11 Biology (C) SBI3C.

#### ACADEMIC RECOMMENDATIONS

To help students in making decisions about a career in Practical Nursing, it is recommended that - prior to admission - they gain an understanding of nursing through some exposure to nurses and the health care field. This may include volunteer work, interviewing a practical nurse, or participating in a career day experience. We strongly recommend that students, for their own personal safety, have the Hepatitis B vaccine prior to entering into the program. We strongly recommend that the students have some computer/word processing experience.

# **CAREER PATHS**

Today's registered practical nurse is a valued member of the health care team. Graduates have employment opportunities in practice settings such as hospitals, community, long-term care and other health care facilities, services and programs. In addition, they may find employment opportunities within other organizations and agencies that require nursing knowledge and expertise. Graduates choosing to work in a specialized area may require additional education or work experience.

In Ontario, the Regulated Health Professions Act (RHPA) and the Nursing Act have conditions for registration that impact Ontario students entering and completing the Practical Nursing program and proceeding to write the registration examinations. These conditions are required to protect public interest.

When applying for provincial registration, information must be provided about citizenship, previous incidence of criminal offences, professional misconduct, and incompetence or incapacity in another health profession in Ontario or in nursing in another jurisdiction. Applicants must also provide information about any physical and/or mental disorders that make it desirable, in the public interest, that the person not practise. This new legislation for all individuals requesting registration should be reviewed by students applying to the Practical Nursing program.

For information on the implications of this new legislation, call the College of Nurses of Ontario at 1-800-387-5526.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,261.10	\$1,127.00	\$17,907.00	\$1,587.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **DRESS CODE**

#### **Dress Code for Practicum and Labs:**

A neat and well-groomed appearance is expected of the student in Practical Nursing by the public we serve, the institutions with whom we share contractual agreements and the Nursing profession. A professional image communicates respect, caring and inspires confidence and trust with our clients and others.

It is expected that Sault College students in Practical Nursing will follow the Dress Code as outlined in the Student Success Guide at all times and will also adhere to the policies of the agencies they are visiting as students.

Depending on specific agency policy, it may be necessary for the student to remove all visible body piercing or conceal visible tattoos which the agency feels are not appropriate in meeting the professional/safety expectations for their clients.

#### 1. Identification

- A Sault College name tag is to be worn at all times when in the practicum/community areas.
- A school crest is to be worn on the upper left side of the uniform and the warm-up jacket (if worn). The crest is to be attached securely (no staples or pins).

#### 2. Uniforms

- Practical Nursing students will wear a navy blue uniform (no writing on the uniform). The style of the uniform must be professional in appearance. The uniform must have sleeves (no T-shirts or jeans). No low V-neck uniforms allowed. The uniform will be clean, pressed, in good repair and fit must be sufficient to allow for reaching and bending without exposing skin.
- Pants are to be hemmed and should not touch the floor (no rolled ankle cuffs).
- A navy blue warm-up jacket may be worn. Warm up jackets are not to be worn at the bedside when delivering patient care. There is to be no writing on the warm-up jacket.

- White/navy blue colour coordinated untasseled ankle socks may be worn with pantsuits.
- Keys, pens or stethoscopes are not to be worn around the neck.
- When a student is in the practicum area in street clothes (ie. data collecting, Community agency), attire, including footwear, must be professional (no T-shirts, sweat shirts or sweat pants or jeans). Name tags are to be worn.
- Uniforms are not to be worn to and from work unless otherwise directed.
- Duty shoes are not to be worn outside the facility. Clean, all white duty shoes with closed heel and toe and non-skid soles are required.

#### 3. Jewellery

- A watch with a second indicator is required.
- A plain wedding band is allowed.
- Neck chains, if worn, must be inside the uniform.
- One pair of small studs or keeper earrings allowed-one earring per ear.
- Practical Nursing students are required to have bandage scissors.

#### 4. Hair

- Hair is to be neatly styled and worn off the face and collar.
- Men are to be clean-shaven and have facial hair trimmed.

#### 5. Make-up

- Make-up, if worn, is to be subdued.
- Fragrance/colognes may not be used.
- Nails are to be clean, short and unpolished.
- No artificial nails are permitted.

**NOTE:** At certain labs, the dress code policy may be altered at the teacher's discretion.

# **CLINICAL/LAB OR FIELD PLACEMENTS**

Students will be required to submit documentation of having completed the following prior to entering the clinical placement components of the program. If the appropriate documentation is not received within 15 days after the start of the semester, it may be necessary to withdraw the student from the course.

All applicants will be required to submit documentation of having completed the following prior to entering the clinical components of the program. This documentation is to be submitted within the first 15 days of the semester.

- 1. Standard 1st Aid Certificate (current within 3 years)
- 2. CPR (Health Care Provider or Basic Life Support Level) Certificate yearly recertification required
- 3. WHMIS Certificate (current within one year)

4. N95 Mask Fit Testing Card (renew every 2 years). Successful mask fit testing requires a **clean shaven face** (minimal facial hair) to administer the test.

- 5. Immunization & Health Record
  - A complete College Health Form along with an official immunization record is to be submitted to the College Health Centre. Contact your health care provider, medical clinic or in Sault Ste. Marie and

District, Algoma Public Health if you need to update your immunization record.

#### Documentation of the following is required:

- proof of a 2-step Mantoux test for tuberculosis. For a known positive test, you must be assessed by a physician and receive medical documentation to have access to placement (a chest x-ray is required). Practical Nursing students require annual 1-step TB testing after a 2-step has been completed.
- proof of measles, mumps and rubella immunization
- proof of tetanus/diphtheria immunization
- proof of chicken pox immunization or immunity
- Hepatitis B series or Twinrix vaccine series (either one is acceptable)
- Influenza immunization each October/November of the program. The flu vaccine is not mandatory however in the event that a student refuses the vaccine, the student must follow placement agency policies. This may mean removal from clinical placement for the duration of an influenza outbreak. The vaccine takes two weeks to come into effect and therefore students who do not get it by the established deadline may be removed from clinical placement.

#### Criminal Record Check with Vulnerable Sector Search

- This document is mandatory for agencies to grant access to vulnerable persons. Students will be given detailed information about obtaining a current Criminal Record Check during the first month of classes or when clinical placements are confirmed. (Note: If a criminal record exists or charges are pending, you are required to disclose this information to the Chair of Health Programs before the start of your program.)
- Criminal Record Check with Vulnerable Sector Search is a yearly requirement that must be?updated annually.

#### **Dress Code:**

• Practical Nursing students follow program and placement agency policies. Detailed information will be provided during the first semester of the program.

All costs associated with these requirements are the responsibility of the student.

The student also signs a Statement of Confidentiality Form. Physical demands analysis may be required by the placement facility.

#### Notice to International Students:

- The necessary immunizations for your program can be obtained from your home country and you will need to submit those immunization records along with the College Health Form to the Sault College Health Centre.
- All other requirements (Standard First Aid, CPR, WHMIS, N95 Mask Fit, Criminal Record Check with Vulnerable Sector Search) must be obtained and completed after your arrival in Ontario.
- As per Canadian Immigration policy, all International students completing a program with a practicum (field/clinical placement) component must obtain a Coop/Work Permit from Immigration, Refugees and Citizenship Canada stating that they are permitted to attend practicum as in integral part of their studies. International students will not be able to attend placement without submitting this permit for verification.

For further information regarding clinical and field placement requirements for this program, please contact Lori Zuccato either by email: <u>lori.zuccato@saultcollege.ca</u> or by phone: 705-759-2554 ext. 2693.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I PNG111-3 Anatomy and Physiology I PNG113-3 Human Relationships PNG115-3 Nursing Theory I PNG116-4 Nursing Practice I PNG117-3 Professional Growth I GEN100-3 Global Citizenship PSY120-3 Lifespan Development

#### **SEMESTER 2**

PNG121-3 Anatomy and Physiology II PNG127-3 Health Assessment PNG130-3 Nursing Theory II PNG131-16 Nursing Practice II

#### Select one of the following:

GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 3**

PNG233-4 Pathophysiology I PNG234-3 Pharmacology I PNG236-16 Nursing Practice III PNG237-3 Professional Growth II PNG238-4 Nursing Theory III

#### **SEMESTER 4**

PNG250-3 Pharmacology II PNG251-4 Pathophysiology II PNG252-4 Nursing Theory IV PNG253-10 Nursing Practice IV PNG254-16 Nursing Practice V **Note:** Placement in PNG254 (consolidation) depends on successful completion of all PNG courses and PSY120 taken in semesters 1 to 4. All students not meeting these pre-requisites will be removed from PNG254.

## **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Anatomy and Physiology I (PNG111) (3 credits)

This course introduces the learner to the normal development, structures and functions of the human body. The learner will examine the physiological components of the human body, in order to obtain

knowledge and understanding about how the structures and functions of the body are related.

## Human Relationships (PNG113) (3 credits)

Using an experiential approach, this course will focus the leaner on the skills necessary to communicate effectively on a personal and professional level. The concepts of caring will be used as a basis to explore the helping relationship, interviewing skills and group dynamics.

## Nursing Theory I (PNG115) (3 credits)

This course will introduce the learner to the theoretical and conceptual framework of health and healthy lifestyles. The dimensions of human needs will be explored with an emphasis on the significance of self-responsibility, culture and the change process. The evolution of Canada's health care delivery system will also be examined.

#### Nursing Practice I (PNG116) (4 credits)

This course will provide the learner opportunities to apply concepts and knowledge gained in the classroom environment to practice settings. The emphasis will be on health promotion of well individuals throughout the lifespan. The learner will be exposed to individuals in selected age groups, through simulation, practice in laboratory and community facilities.

## Professional Growth I (PNG117) (3 credits)

This course will examine personal learning styles, the concepts of teaching and learning and their importance in the practice of nursing. The use of information technology will be applied to reading and understanding research reports. The concepts of caring, standards of practice and reflective practice will be introduced. The learner will have the opportunity to explore the evolution of nursing, nursing theories and the philosophy of nursing.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Lifespan Development (PSY120) (3 credits)

The purpose of this lifespan development course is to examine the interrelationship of the biopsychosocial aspects of ages and stages from birth to late adulthood. Developmental psychology is the study of the processes that shape human development. The goals of studying life span development are description, explanation and optimization of human development throughout a persons entire life. Students will study the interaction between cultural, social and historical impacts and biological maturation to gain a holistic understanding of human development. In addition, to studying human development in a systematic way, students will gain a personal understanding of their own lives in the context of lifespan development.

## Semester 2

## Anatomy and Physiology II (PNG121) (3 credits)

This course is a continuation of Anatomy and Physiology I and will further examine the relationship of body structures and their functions. Understanding of the remaining body systems will provideyou with knowledge and understanding about how these systems work together to carry on complex functions within the human body.

## Health Assessment (PNG127) (3 credits)

This course will provide the learner with the skills required to conduct a holistic health assessment for a

normal healthy individual during all stages of the lifespan. The concepts of wellness, health promotion, health protection and client teaching will be integrated throughout the course.

## Nursing Theory II (PNG130) (3 credits)

This course will focus on health promotion and health protection strategies for selected individuals throughout the lifespan. These concepts will be studied as they apply to families, groups and communities. The evolution of Canada's health care system delivery system will also be examined.

## Nursing Practice II (PNG131) (16 credits)

This course further explores the concept of health promotion and health protection with well clients. The learner will gain basic assessment and nursing skills required to care for the client in selected age groups. This course is also designed to assist the learner to acquire knowledge and develop mathematical skills required to safely calculate drug dosages.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

## Semester 3

## Pathophysiology I (PNG233) (4 credits)

This course provides the learner with a general understanding and working knowledge of the structure and function of the human body experiencing an acute health challenge. The learner will examine changes that occur in the human body and explore how the body compensates for those challenges. Included in this course is the study of basic principles of microbiology. The textbooks can be purchased from the Campus Shop.

## Pharmacology I (PNG234) (3 credits)

This course introduces the learner to the concepts of pharmacology as selected drug groups are studied. The course will emphasize the role and responsibilities of the practical nurse in the administration and monitoring of client medications.

## Nursing Practice III (PNG236) (16 credits)

This course will provide the learner with opportunities to examine the role of the practical nurse when caring for individuals with health challenges. The learner will utilize critical thinking skills to plan and implement holistic nursing care. The experience will take place in the laboratory setting and in a variety of medical-surgical areas.

## Professional Growth II (PNG237) (3 credits)

This course will prepare the learner for entry into the workplace through exploration of leadership, conflict resolution and advocacy. Leadership and management roles within health care will be examined. The process of transition from student to nurse will be explored.

## Nursing Theory III (PNG238) (4 credits)

This course will focus on assisting the learner to develop a holistic approach to nursing. A variety of approaches will be utilized and critical thinking strategies will be emphasized as the learner explores the case of individuals, families and/or groups experiencing or predisposed to acute physical and mental health challenges.

## Semester 4

## Pharmacology II (PNG250) (3 credits)

This course continues to explore concepts of pharmacology as selected drug groups are studied. The course will emphasize the role and responsibilities of the practical nurse in the administration and monitoring of client medications.

## Pathophysiology II (PNG251) (4 credits)

The learner will develop an understanding of chronic health challenges by examining how the body adapts to or compensates to maintain its optimal state. The study of basic principles of microbiology will be continued.

## Nursing Theory IV (PNG252) (4 credits)

In this course, the learner will continue to develop a holistic approach to nursing. A variety of approaches to learning will be utilized and critical thinking strategies will be emphasized as the learner explores the case of individuals, families and groups experiencing requiring rehabilitative, restorative and palliative care. The learner will also explore the care of individuals experiencing chronic mental health challenges.

## Nursing Practice IV (PNG253) (10 credits)

This course will continue to provide the learner with opportunities to examine the role of the practical nurse when caring for individual with health challenges. Critical thinking skills will be refined to plan and implement holistic nursing care. The experience will take place in the laboratory setting and in a variety of medical/surgical areas.

## Nursing Practice V (PNG254) (16 credits)

This clinical experience will provide the learner with the opportunity to consolidate the required skills and knowledge to graduate as a caring and competent beginning practitioner. This experience will take place in acute, long-term, chronic care or community settings where the learner will be partnered with a Registered Practical Nurse as a preceptor.

# Pre-Health Sciences Pathway to Advanced Diplomas and Degrees

Section B.106 6/2/2020

Ontario College Certificate (1 Year - 2 Semesters ) (3065) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This program is designed to provide students with the core knowledge, skills and abilities fundamental to academic success in health sciences and other high affinity programs at the diploma, advanced diploma or degree level.

Students will develop their knowledge and skills in communication, mathematics, human anatomy, biology, physics and organic/inorganic chemistry so they are well-prepared for the rigours of their next academic program. In addition, the program provides students with the opportunity to learn about potential careers in the health sciences and to identify other programs focusing on the biological or chemical sciences that will enable them to achieve their career objectives.

This is a two-semester certificate-level program leading to an Ontario College Advanced Diploma or Degree.

#### **PROGRAM OUTCOMES**

#### The graduate has reliably demonstrated the ability to:

- 1. Analyze biological concepts such as homeostasis and apply them to the study of human anatomy and physiology.
- 2. Analyze key concepts and principles of general and organic chemistry, and explain the impact of chemical reactions and biochemistry on the human body.
- 3. Analyze appropriate mathematical concepts to solve typical health-field-related calculations and apply concepts of probability, descriptive and inferential statistics to interpret health and science-related data.
- 4. Communicate clearly, concisely, and correctly in written, spoken, and visual form using language and terminology appropriate and relevant to health and other science-related fields.
- 5. Analyze the fundamental laws of physics and discuss how they apply to human health and wellness.
- 6. Investigate future careers in health sciences and other high affinity fields and identify appropriate postsecondary programs to prepare for chosen career.
- 7. Discuss strategies for ongoing personal and professional development.

## Reference

Ministry of Advanced Education and Skills Development, Pre-Health Sciences Pathways to Advanced Diplomas and Degrees Program Standards (MTCU 41599), March 2017.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

OSSD or equivalent or mature student status.

## **CAREER PATHS**

Upon successful completion of the program, the student will be eligible to apply for admission to the first year of a health and/or science-related advanced diploma or degree program at an Ontario College of Applied Arts and Technology and to many health or science related degree programs at Ontario universities.

The curriculum has been designed to meet subject specific entrance requirements.

Successful completion of the program does not guarantee entry into any specific program.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **EDUCATIONAL PATHS**

It is expected that graduates of the Pre-Health Sciences Pathway to Advanced Diplomas and Degrees program will be eligible to apply for admission to multiple health and/or science programs at the advanced diploma and degree level at an Ontario College of Applied Arts and Technology and to many health and/or science programs at the degree level at an Ontario college or university.

The curriculum has been designed to meet subject-specific entrance requirements.

Successful completion of the program does not guarantee entry into any specific program.

## **OTHER INFORMATION**

For more information contact Program Coordinator Leslie Dafoe at 705.759.2554, ext 2630 or email leslie.dafoe@saultcollege.ca.

## **PROGRAM OF STUDY**

## **SEMESTER 1**

BIO190-4 Biology I for PADD CHM190-5 Chemistry I for PADD CMM110-3 College Communication Skills COM102-3 Computers in Human Services MTH190-4 Math I for PADD

## **SEMESTER 2**

BIO191-4 Biology II for PADD CHM191-5 Chemistry II for PADD

## **Course Descriptions**

## Semester 1

## Biology I for PADD (BIO190) (4 credits)

This course will enable the learner to develop a foundation in the fundamental concepts of Biological Sciences and application to the systematic study of the human body. The student will study and explore the following areas: cell biology, Mendelian genetics, evolution, and human anatomy & physiology for a variety of body systems, including the integumentary, the skeletal (including articulations), and the muscular. The learner will apply these concepts with a systemic approach to the study of the human body. In the context of the study of the various organ systems, the learner will be introduced to common pathologies with examples taken from current scientific research. The emphasis will be on understanding the underlying concepts and principles, and applying them to the diversity of body systems

## Chemistry I for PADD (CHM190) (5 credits)

Chemistry I for PADD will enable students to deepen their understanding of chemistry through the study of atomic and molecular structure, chemical systems and equilibrium, electrochemistry, energy changes and rates of reactions, and organic chemistry. These topics will have a strong health science emphasis and will provide students with a chemistry perspective of health and the human body. Course work will include examples and problems that relate to health and the human body. Topics in this course include physical and chemical properties of matter, chemical bonding, atomic and molecular structure, chemical nomenclature, chemical equations, chemical quantities, stoichiometry, the gas laws, and solutions and solubility. Laboratory investigations in this course will focus on safety, measurement, and common practices and procedures. The purpose of the lab work is to develop practical skills while gaining a better understanding of the theoretical concepts and calculations.

## College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Computers in Human Services (COM102) (3 credits)

This course is designed to provide students with the level of computer literacy needed to function in today's workplace. Utilizing a hands-on approach, general computer concepts, and the concepts of microcomputer operating systems, Internet, and word processing applications will be introduced. A personal E-mail account will be introduced and used throughout the course to facilitate good communications between students and faculty and simulate the modern work environment.

## Math I for PADD (MTH190) (4 credits)

By the end of this course, students will have demonstrated the ability to evaluate a variety of arithmetic and algebraic expressions and apply these principles to typical problems that arise in the health care fields. Concepts studied include numeracy fundamentals; systems of measurement and dimensional analysis; and algebra, with an emphasis on analytical techniques. Students will develop essential critical thinking and problem-solving skills through exposure to application problems, including dosage calculations, solution dilutions, and concentrations.

## Semester 2

#### Biology II for PADD (BIO191) (4 credits)

This course will enable the learner to continue to develop a foundation in the fundamental concepts of Biological Sciences and application to the systematic study of the human body. The learner will study and explore the following areas: molecular genetics, human anatomy & physiology for a variety of systems, including the nervous, endocrine, cardiovascular, respiratory, digestive, urinary, reproductive, lymphatic and immune systems, and an introduction to infectious organisms and the processes of infectious diseases. The learner will apply these concepts with a systemic approach to the study of the human body. In the context of the study of the various organ systems, the learner will be introduced to common pathologies with examples taken from current scientific research. The emphasis will be on understanding the underlying concepts and principles, and applying them to a diversity of body systems.

#### Chemistry II for PADD (CHM191) (5 credits)

In this course, students will apply fundamental concepts and skills from CHM190 to further examine chemical reactions and systems. This course approaches chemistry from a health and human body perspective and includes topics in organic chemistry, redox reactions, energy changes in chemical and physical processes, chemical kinetics, equilibrium systems, and acids and bases.

Laboratory work in this course will focus on applying the scientific method to investigations in chemistry, the human body, and health. The purpose of the lab work is to develop investigative and research skills while gaining a better understanding of the theoretical concepts.

#### Medical Terminology (MED111) (3 credits)

This basic course will focus on the anatomical structure and function of the human body and related terminology used to describe body parts, structure and function. Related terminology will also include general or symptomatic terms, diagnostic terms, surgical procedures and abbreviations.

## Math II for PADD (MTH191) (3 credits)

By the end of this course, students will have demonstrated the ability to graph, describe, and evaluate linear, quadratic, exponential, and logarithmic functions. Critical thinking and problem-solving skills will continue to develop through exposure to application problems including exponential growth, radioactive decay, and pH. Students will use numerical methods along with graphs, charts, and tables to effectively describe data, calculate the empirical and theoretical probability of simple events using key rules of probability, and apply descriptive and inferential statistics to applications from the health care fields. Students will develop essential critical thinking and problem-solving skills through exposure to application problems, including dosage calculations, solution dilutions, concentrations and pH. Students will use numerical methods to calculate measures of center and variation. Students will distinguish between discrete and continuous probability distributions and describe key features of the standard normal distribution, and calculate confidence intervals for means and proportions and apply descriptive and inferential statistics to the health care field.

## Introduction to Canadian Health Care Providers (PHS130) (2 credits)

This course introduces students to Canadian health care providers involved in the circle of care. It promotes an understanding of the diversity of roles and inter-professional relationships of various health professionals. Students explore the roles of professional associations and the regulatory bodies. Models of health care delivery and key elements of inter-professional health care teams are discussed.

# Pre-Health Sciences Pathway to Certificates and Diplomas

Section B.107 6/2/2020

Ontario College Certificate (1 Year - 2 Semesters ) (3060)705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This program is designed to prepare graduates for admission to Ontario College Certificate and Diploma programs at Ontario Colleges of Applied Arts and Technology in the health sciences or other related programs in the biological or chemical sciences.

The program provides students with the knowledge and skills in communication, mathematics, human anatomy, biology and chemistry needed to be successful in health and science-related college programs. In addition, the program provides students with the opportunity to learn about potential careers in the health sciences and to identify other college programs focusing on the biological or chemical sciences that will enable them to achieve their career objectives.

This is a two-semester certificate-level program leading to an Ontario College Certificate or Diploma.

#### **PROGRAM OUTCOMES**

#### The graduate has reliably demonstrated the ability to:

- 1. Discuss and analyze biological concepts and systems of human biology, specifically cells, tissues and organ systems, and identify their relation to homeostasis, health, wellness and the human body.
- Discuss the fundamental concepts of chemistry, specifically the properties of matter and organic compounds, and apply them to processes and applications related to health, wellness and the human body.
- 3. Apply concepts of mathematics and statistics to interpret health care data and solve typical mathematical problems in health care and related science professions.
- 4. Communicate clearly, concisely, and correctly in written, spoken, and visual form using language and terminology appropriate and relevant to health and other science-related fields.
- 5. Investigate future careers in health sciences and high affinity fields and identify appropriate postsecondary programs to prepare for chosen career.
- 6. Discuss strategies for ongoing personal and professional development.

#### **Reference**

Ministry of Advanced Education and Skills Development, Pre-Health Sciences Pathways to Certificates and Diplomas Program Standards (MTCU 41598), March 2017.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

OSSD or equivalent or mature student status.

## **CAREER PATHS**

Upon successful completion of the program, the student will be eligible to apply for admission to the first year of a health and/or science-related certificate or diploma program at an Ontario College of Applied Arts and Technology.

The curriculum has been designed to meet subject-specific entrance requirements.

Successful completion of the program does not guarantee entry into any specific program.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
N/A	N/A	N/A	N/A

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **EDUCATIONAL PATHS**

It is expected that graduates of the Pre-Health Sciences Pathway to Certificates and Diplomas program will be eligible to apply for admission to multiple health and/or science programs in Ontario Colleges of Applied Arts and Technology at the certificate or diploma level.

## **OTHER INFORMATION**

This program will not be offered in the 2020 / 2021 Academic Calendar Year.

For more information contact Program Coordinator Leslie Dafoe at 705.759.2554, ext 2630 or email <u>leslie.dafoe@saultcollege.ca</u>.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

BIO180-4 Biology I for PCD CHM180-4 Chemistry I for PCD CMM110-3 College Communication Skills COM102-3 Computers in Human Services MTH180-4 Math I for PCD

## **SEMESTER 2**

BIO181-4 Biology II for PCD CHM181-4 Chemistry II for PCD MED111-3 Medical Terminology MTH181-3 Math II for PCD PHS130-2 Introduction to Canadian Health Care Providers

## **Course Descriptions**

#### Semester 1

## Biology I for PCD (BIO180) (4 credits)

This course will introduce the student to the basic concepts of biology, both general and human. The course begins with an overview of life and biological systems. This is followed by an introduction to human biology as it relates to health and wellness. Emphasis is placed on organization of the body into cells, tissues and organ systems. Topics include characteristics, classification and organization of life, cell structure and function, meiosis and mitosis, basic Mendelian genetics, homeostasis, and the anatomy and physiology of select human organ systems.

## Chemistry I for PCD (CHM180) (4 credits)

In Chemistry for Health Sciences, students will learn the fundamentals of chemistry with real life examples and apply them in processes and applications that relate to health care fields. The concepts studied will include the study of matter and chemical bonding, quantities in chemical reactions, solutions and solubility, acids and bases. In this course, students will examine the fundamental concepts, procedures, and calculations of chemistry. Course work will include examples and problems that relate to health and the human body. Topics in this course include physical and chemical properties of matter, chemical bonding, nomenclature, chemical quantities, chemical reactions, and stoichiometry.

Laboratory investigations in this course will focus on safety, measurement, and common practices and procedures. The purpose of the lab work is to develop practical skills while gaining a better understanding of the theoretical concepts and calculations.

## College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Computers in Human Services (COM102) (3 credits)

This course is designed to provide students with the level of computer literacy needed to function in today's workplace. Utilizing a hands-on approach, general computer concepts, and the concepts of microcomputer operating systems, Internet, and word processing applications will be introduced. A personal E-mail account will be introduced and used throughout the course to facilitate good communications between students and faculty and simulate the modern work environment.

## Math I for PCD (MTH180) (4 credits)

By the end of this course, students will have demonstrated the ability to evaluate a variety of arithmetic and algebraic expressions and apply these principles to typical problems that arise in the health care fields. Concepts studied include numeracy fundamentals; systems of measurement and dimensional analysis; and algebra, with an emphasis on analytical techniques. Students will develop essential critical thinking and problem-solving skills through exposure to application problems, including dosage calculations, solution dilutions, and concentrations.

## Semester 2

## Biology II for PCD (BIO181) (4 credits)

This course will continue to introduce the student to the basic concepts of biology, both general and human. The course follows topics introduced in Bio180, with a review of the organization of the body into cells, tissues and organ systems. Topics include the anatomy and physiology of following human organ

systems: cardiovascular, respiratory, digestive, urinary, integumentary, and lymphatic & immune. In addition, there will be an introduction to infectious organisms. By the end of the course, students will have an appreciation for the complexity of the human body and its functions.

## Chemistry II for PCD (CHM181) (4 credits)

In this course, students will continue to examine the fundamental concepts, processes, and calculations of chemistry. This course approaches chemistry from a health and human body perspective and includes topics in the gas laws, solutions and solubility, acids and bases, biochemical reactions, nomenclature and properties of organic compounds- their nomenclature, structure, properties based on intermolecular forces and reactions. These topics will have a strong health science emphasis and will provide students with a chemistry perspective of health and the human body. The chemistry concepts will continually highlight the connections of chemistry with health, medicine and research areas. Lab work in this course will focus on applying the scientific method to investigations in chemistry, the human body, and health. The purpose of the lab work is to develop investigative and research skills while gaining a better understanding of the theoretical concepts.

## Medical Terminology (MED111) (3 credits)

This basic course will focus on the anatomical structure and function of the human body and related terminology used to describe body parts, structure and function. Related terminology will also include general or symptomatic terms, diagnostic terms, surgical procedures and abbreviations.

## Math II for PCD (MTH181) (3 credits)

By the end of this course, students will have demonstrated the ability to graph, describe, and evaluate linear, quadratic, exponential, and logarithmic functions. Critical thinking and problem-solving skills will continue to develop through exposure to application problems including exponential growth, radioactive decay, and pH. Students will use numerical methods along with graphs, charts, and tables to effectively describe data, calculate the empirical and theoretical probability of simple events using key rules of probability, and apply descriptive and inferential statistics to applications from the health care fields.

Students will develop essential critical thinking and problem-solving skills through exposure to application problems, including dosage calculations, solution dilutions, and concentrations.

## Introduction to Canadian Health Care Providers (PHS130) (2 credits)

This course introduces students to Canadian health care providers involved in the circle of care. It promotes an understanding of the diversity of roles and inter-professional relationships of various health professionals. Students explore the roles of professional associations and the regulatory bodies. Models of health care delivery and key elements of inter-professional health care teams are discussed.

# Sterile Supply Processing

Section B.108 6/2/2020

Certificate (Part-time Continuing Education ) (3055) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

Graduates of this part-time program will acquire the knowledge and skills for career opportunities in hospitals, surgical centres and health care settings related to the sterilization, preparation and storage of equipment, instruments and supplies. Students will learn critical techniques in safe handling of instrumentation, infection control and aseptic techniques. All theory courses are on-line. Students will learn:

- Apply knowledge of the principles of infection control and personal protection in the decontamination, packaging and sterilization of instruments and equipment.
- Perform decontamination procedures and practices for patient care equipment and surgical
- Prepare equipment and supplies of sterilization.
- Package instruments and supplies.
- Sterilize instruments and supplies
- Clean, check and prepare micro-instruments for sterilization.
- Identify predictable problems in the care and handling of instrumentation.
- Identify the principles of inventory control, sterile storage and distribution of supplies.
- Communicate effectively with co-workers.

Thisis a part-time program that is offered online via the internet, while the final course (SSP1216) is offered via independent study and can be started at any time. Online courses begin every January, May and September. Some online courses begin each month.

This program is available on a course by course basis. Students may choose to complete one or more courses each semester. Students in this program are not eligible for OSAP funding. Courses within this program must be completed within 7 years, unless otherwise specified.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C or mature student status.

## **CAREER PATHS**

Graduates of this part-time program will acquire the knowledge and skills for career opportunities in hospitals, surgical centres and health care settings related to the sterilization, preparation and storage of equipment, instruments and supplies. Students will learn critical techniques in safe handling of instrumentation, infection control and aseptic techniques.

For more details on related occupations, job market information and career opportunities, see the Government of Canada website: https://www.jobbank.gc.ca/

## **CLINICAL/LAB OR FIELD PLACEMENTS**

Fieldwork experience provides the student with the opportunity to apply classroom theory to an actual employment situation. Students with experience in the sterile processing field may apply for prior learning assessment (PLAR).

All applicants with be required to submit documentation of having completed the following procedures prior to entering clinical/lab, identified courses and/or field placement components of the program. If the appropriate documentation is not received with at least two weeks before the start of the identified clinical/lab/course and/or field placement, it may be necessary to withdraw the student from the course.

- A current (within six months) Police Record Search. This is required by students as they are enrolled in a program during which they will have unsupervised access to vulnerable persons
- Immunization and Heath Record Form. This form includes the following immunization requirements:, Two-step TB test, Immunity against measles, mumps and rubella, current tetanus, diphtheria immunization, current influenza immunization.
- Statement of Confidentiality Form, WSIB, and Workplace Agreement Form. These forms will be given to you to sign prior to your fieldwork placement.
- WHMIS.

All costs associated with these requirements are the responsibility of the student.

## **OTHER INFORMATION**

Some hospitals may also require reprocessing staff to complete the CSAOs (Central Service Association of Ontario) course and hold CSAO or CSA certification.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

OEL1210-3 Microbiology and Infection Control for Sterile Processing OEL1211-3 Identification, Care and Handling of Instrumentation OEL1212-3 Decontamination Principles, Procedures and Practices OEL1213-2 Assembly, Wrapping, Packaging of Instrumentation, Supplies OEL1214-3 Disinfection and Sterilization Concepts and Techniques OEL1215-2 Sterile Storage, Inventory Control, Management of Resources OEL306-3 Medical Terminology SSP1216-3 Sterile Supply Processing Placement

## **Course Descriptions**

#### Semester 1

Microbiology and Infection Control for Sterile Processing (OEL1210) (3 credits)

Introduces the SPT to the sterile processing role and environment, microbiology, infection control, aseptic technique and workplace environmental hazards.

#### Identification, Care and Handling of Instrumentation (OEL1211) (3 credits)

Introduces the student to instrument classification, specifics of proper handling techniques and recognition of common problems related to instrument usage.

## Decontamination Principles, Procedures and Practices (OEL1212) (3 credits)

Introduces students to the principles of decontamination including instrument/equipment disassembly, various methods of cleaning/disinfecting, use of decontamination equipment (automated), proper workflow, standard precautions and the safe handling of sharps and medical bio-hazardous waste

#### materials.

#### Assembly, Wrapping, Packaging of Instrumentation, Supplies (OEL1213) (2 credits)

Introduces students to the proper techniques for the assembly, wrapping and/or packaging of surgical instruments, supplies and patient care equipment. Student will need a video camera or cell phone camera with video capability.

#### Disinfection and Sterilization Concepts and Techniques (OEL1214) (3 credits)

Introduces the key principles and factors affecting sterilization and monitoring sterilization cycles. Common types of sterilization processes will be explored.

#### Sterile Storage, Inventory Control, Management of Resources (OEL1215) (2 credits)

Introduction to sterile storage, inventory control distribution systems including the case cart system, portering, and stock rotation.

#### Medical Terminology (OEL306) (3 credits)

Develop the language required to communicate effectively in a medical setting. Medical terminology, word structure as well as diagnostic procedures and pharmacology related to twelve body systems will be studied.

#### Sterile Supply Processing Placement (SSP1216) (3 credits)

Select your 40-hour placement to apply learned theory to a sterile processing setting. You will be required to have successfully completed all sterile supply processing courses, a completed health form, current CPR, negative criminal record (dated within 1 month of placement).

# Anishinaabemowin - Immersion

Section B.109 6/2/2020

Ontario College Certificate (1 Year - 2 Semesters ) (1031) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

This program is only available by request for in-community delivery.

This unique Ontario College Certificate program is the only one of its kind found in Ontario Community Colleges. Students will have the opportunity to become immersed in the Ojibwe language 95% of the course time. Utilizing an immersion-based approach to learning language, this program is designed to enable students to develop a level of conversational fluency in which to effectively communicate in Ojibwe. Implementation of originally designed curriculum and utilization of effective teaching modes will provide students with a learning environment that is not only conducive to language learning but also provides a connection to First Nation traditions, culture and values.

One of the few Native language immersion certificates offered in North America, this program of study is for those wanting to grasp the nuances and grammatical structures of the Ojibwe language as you become fluent in speaking, writing and understanding.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status.

## **CAREER PATHS**

Graduates will possess a level of competency with the Ojibwe language and culture that will increase their marketability in linguistic, educational, social service and the criminal justice fields in relation to dealing with Aboriginal communities and clients.

## **EDUCATIONAL PATHS**

Graduates of the Anishinaabemowin language program may use their knowledge as a stepping stone for further education. Discussions are currently underway to formalize articulation agreements for advanced standing in degree programs with other post-secondary institutes.

## **PROGRAM OF STUDY**

## **SEMESTER 1**

NLG100-6 Odibaajimotaadwin I (Storytelling I) NLG102-6 Zhibiigewin I (Writing I) NLG104-6 Namewin I (Cultural Identity I) NLG106-6 Nigamowin I (Singing I)

## **SEMESTER 2**

NLG110-6 Odibaajimotaadwin II (Storytelling II) NLG112-6 Zhibiigewin II (Writing II) NLG114-6 Namewin II (Cultural Identity II) NLG116-6 Nigamowin II (Singing II)

## **Course Descriptions**

## Semester 1

## Odibaajimotaadwin I (Storytelling I) (NLG100) (6 credits)

This course is an introduction to basic storytelling methods and legends. Through the use of a variety of exercises in the oral tradition, students will begin to develop competency in speaking the language. Use of a language lab will be available to provide students with special assistance required for pronunciation. Emphasis is placed on listening to and speaking the language.

## Zhibiigewin I (Writing I) (NLG102) (6 credits)

This course is designed to introduce students to the structure of Ojibwe orthography. Students will have the opportunity to read and compose written text in the language as well as begin to explore Ojibwe storytelling, legends and oratory. Emphasis is placed on reading and writing the Ojibwe language.

## Namewin I (Cultural Identity I) (NLG104) (6 credits)

The course will begin to explore Native values and spirituality and, in particular, how Anishinaabemowin reflects culture. Orthography learned in Zhibiigewin I will be reinforced. Emphasis will be placed on listening in order to develop language comprehension.

## Nigamowin I (Singing I) (NLG106) (6 credits)

Nigamowin utilizes a variety of contemporary and traditional songs to reinforce learning. Students will have the opportunity to comprehend and learn songs in the Anishinaabemowin as well as begin to translate a variety of songs. Students will begin to recognize the role of tradition and ritual in the art of singing.

## Semester 2

## Odibaajimotaadwin II (Storytelling II) (NLG110) (6 credits)

This course is designed to reinforce concepts learned in Odibaajimotaadwin I. Students will begin to consolidate and develop their ability to use the Ojibwe language in oral communication. The course aims to expand the students' active vocabulary for everyday dialogue.

## Zhibiigewin II (Writing II) (NLG112) (6 credits)

A continuation of Zhibiigewin I, this course will reinforce concepts introduced in Zhibiigewin I. Consisting of advanced writing exercises, such as translation of text in Ojibwe and English, emphasis will be placed on proper sentence structure and grammar.

## Namewin II (Cultural Identity II) (NLG114) (6 credits)

Namewin II will expand on the concepts learned in Namewin I. Students will be exposed to opportunities to participate and observe in ceremonial practises and observances conducted in the Ojibwe language. Students will also explore the concepts of traditional versus contemporary (Western) world views.

## Nigamowin II (Singing II) (NLG116) (6 credits)

A continuation of Nigamowin I, emphasis will be placed on speaking/singing in the Ojibwe language. Students will refine language skills and develop self-confidence and self-discipline in language learning through rehearsal, practice and revision.

# Social Service Worker - Indigenous Specialization

Section B.110 6/2/2020

**Ontario College Diploma (2 Years - 4 Semesters ) (1221)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Social Service Worker - Indigenous Specialization program is for anyone who is interested in gaining the skills of a social service worker as you advocate for social justice in both Aboriginal and mainstream organizations to help empower individuals, families, and communities. You will be equipped with the enhanced knowledge needed to provide all clients - both Aboriginal and non-Aboriginals alike, the support they need to overcome barriers they may face in their lives.

With a strong foundation in core social service worker skills, the program infuses an Aboriginal worldview throughout the curriculum. Whether you are Aboriginal or not, this impactful program will prepare you to become a skilled social service worker, practise within a culturally competent approach, and demonstrate an increased knowledge of Aboriginal issues and interventions. You will be eligible to register with the College of Social Work and Social Service Workers after completing the program.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

## **PROGRAM OUTCOMES**

## A graduate of the Social Service Worker Indigenous Specialization Program at Sault College will reliably demonstrate the ability to:

1. develop respectful and collaborative professional and interpersonal relationships that adhere to professional, legal, and ethical standards aligned to social service work.

2. record information accurately and communicate effectively in written, digital, verbal and non-verbal ways, in adherence to privacy and freedom of information legislation, in accordance with professional and workplace standards.

3. integrate a practice framework within a service delivery continuum, addressing the needs of individuals, families and communities at micro, mezzo, macro and global levels, and work with them in achieving their goals.

4. plan and implement accessible and responsive programs and services, recognizing the diverse needs and experiences of individuals, groups, families and communities, and meeting these needs.

5. examine current social policy, relevant legislation, and political, social, historical, and/or economic systems and their impacts for individuals and communities when delivering services to the user/client.

6. develop strategies and approaches that support individual clients, groups, families and communities in building the capacity for self-advocacy, while affirming their dignity and self-worth.

7. work from an anti-oppressive, strengths-based practice, recognizing the capacity for resilience and growth of individuals and communities when responding to the diverse needs of marginalized or vulnerable populations to act as allies and advocates.

8. develop strategies and approaches to implement and maintain holistic self-care as a member of a human service profession.

9. work with individuals, groups, families and their communities to ensure that service provider strategies promote social and economic justice, and challenge patterns of oppression, discrimination and harassment, and sexual violence with clients, coworkers and communities.

10. develop the capacity to work with the Indigenous individual, families, groups and communities while respecting their inherent rights to self-determine, and to identify and address systemic barriers that produce ill-effects, developing appropriate responses using approaches such as trauma informed care practice.

11. respectfully collaborate with Indigenous individuals, families and communities to facilitate change considering the historical impact of legislation and social systems on the Indigenous Canadian culture and experience.

12. integrate culturally appropriate strategies and Indigenous methods of healing practices to help empower individuals and communities to solution build within an aboriginal worldview and context.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status.

A mature student is someone who is 19 years of age or older by the first day of College and has not graduated from high school. You can still apply to the program and you have two options:

- You can pay \$25 to write the Canadian Academic Achievement Test (CAAT) for Math and/or English requirements only or
- You can take Academic Upgrading for free to get your high school equivalency for Grade 12 English (college level).

If you have graduated from high school but haven't been to school in a while, you are an adult learner. You still may want to consider free Academic Upgrading offered on campus to re-fresh your skills before the start of your program.

## **CAREER PATHS**

As a Social Service Worker - Indigenous Specialization (SSW-IS) graduate you may find employment a variety of private, governmental, and Indigenous Specific programs in areas of mental health, education, addictions, outreach, family services and social welfare.

As a graduate of the program you would bring the core skills required of a social service worker professional with a level of cultural competence to provide culturally appropriate services.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **CLINICAL/LAB OR FIELD PLACEMENTS**

#### **Apply What You Learn**

In the second year of this program, you will be able to gain valuable work experience and apply the things you learn in class by visiting and working in agencies, treatment centres, youth facilities, women's drop-in centres, and other places where you can apply the skills you learn while studying with us. You will participate in a total of 550 hours of field placement in social service work settings during your second year.

You will need to complete and bring in certain forms at least one week before being scheduled to start your field work. Information regarding the requirements you will need will be sent to you once you are accepted into the program.

#### **Mandatory Field Placement Requirements**

You will need to do a police records search as soon as possible as you will be working with vulnerable persons during your placements. There is a cost to having this done and this can take a few weeks to months to complete. If you have criminal records please contact 705.759.2554 ext. 2560 for further discussion to determine whether a criminal record will affect the fieldwork requirement. Current Tetanus-diphtheria First Aid Certificate and CPR Level C WHMIS (Workplace Hazardous Materials Information System)

Recommended: Hep-B Vaccination is encouraged Current Influenza immunization encouraged

There is a cost to taking some of these tests, and you will have to pay for these. Finally, you will need to have a G.P.A. of 2.0 or higher in order to be considered for placement.

## **EDUCATIONAL PATHS**

## **Professional Designation**

As a graduate of the Social Service Worker-Indigenous Specialization program you will be eligible for registration with the Ontario College of Social Workers and Social Service Workers (OCSWSSW) <u>http://www.ocswssw.org/en/default.htm</u>, subject to applicable fees and membership requirements. The OCSWSSW is a professional regulatory body which recognizes and regulates the social work and social service work profession, creating standards of practice and a professional designation for anyone with the designation of social worker or social service worker.

## **Employment Opportunities**

Upon graduation, you will bring a unique voice to your career that reflects a distinct set of knowledge and

skills, demonstrating competence in the social services workers skill areas with a specialized focus on issues affecting Aboriginal people. You may find jobs in private, governmental and First Nation programs in areas such as mental health, education, youth detention, addictions, outreach, family services and social welfare with individuals, families and communities.

## **Further Education**

Past graduates of the program have gone on to university in areas of social work, sociology, community development, teaching as well as specialized in addictions or Anishinaabemowin & Indigenous Studies. Each university may differ on which credits transfer and are eligible for advanced credit. You are encouraged to research your university of choice to determine if current articulation agreements are in place or how that university recognizes college credits.

As a graduate, you will also have the option of earning a three year Child & Youth Care Diploma in only two academic years. This dual diploma option is available according to a predetermined educational map that provides you with one full year of advanced standing in the CYC program at Sault College.

## **OTHER INFORMATION**

Please Note: This is the new program name and program number for students entering the program in September 2019. It was formerly called Social Services Worker - Native Specialization - Program 1214.

For more information contact Program Coordinator Michelle Proulx at 705.759.2554, ext 2449 or email michelle.proulx@saultcollege.ca.

## **PROGRAM OF STUDY**

## **SEMESTER 1**

CMM110-3 College Communication Skills NSW100-3 Addictions: Individuals, Family and Community NSW101-3 Foundations for Balanced Practice NSW114-3 Understanding Indigenous Wellness in Canada NSW135-3 Introduction to Anishinaabemowin SSW126-3 Introduction to Trauma Informed Care NSW111-3 Human Behaviour and Social Environment

## SEMESTER 2

CMM235-3 S.S.W. Documentation and Record Keeping NSW102-4 Capacity Building for Communities NSW104-3 Canadian Social Welfare and Indigenous Social Policies NSW107-3 The Parallel Worlds of Mental Health NSW125-4 Working with Families NSW203-3 Essential Skills for Social Services PSY120-3 Lifespan Development

## **SEMESTER 3**

NSW200-4 Groups for Multi-Cultural Practice NSW205-3 Fieldwork Seminar for Social Service I NSW208-7 Fieldwork Placement for Social Services I NSW214-4 Incorporating Indigenous Healing Methods into Practice

Select one of the following:

#### GEN110: Student Selected General Education

#### **SEMESTER 4**

NSW212-11 Fieldwork Placement - Social Services II NSW216-3 Fieldwork Seminar For Social Services II NSW221-3 Crisis Intervention GEN100-3 Global Citizenship

## **Course Descriptions**

#### Semester 1

## College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Addictions: Individuals, Family and Community (NSW100) (3 credits)

An addiction interferes with the healthy lifestyle of an individual, their family and their community. Students will gain an understanding of the impact of addictions on the physical, social, mental, spiritual and emotional aspects related to the consequences of addictive behaviours with theoretical and practical applications.

## Foundations for Balanced Practice (NSW101) (3 credits)

The belief in the need for balance in work and personal life is at the core of this course. Students will learn to assess strengths and limitations from individual and community perspectives. Alternative outlooks on problem solving, self-concept and growth will be explored. The teachings of the Sacred Tree will provide a basis for course work.

## Understanding Indigenous Wellness in Canada (NSW114) (3 credits)

This course will provide students with an in-depth examination of Aboriginal history, worldview and culture in Canada. By exploring pre-contact and colonial history students will gain an understanding of the experiences and impacts on Aboriginal wellness and identity. Students will also discover how wellness is impacted as they explore contemporary issues relating to Aboriginal and government relations, such as policies rights and responsibilities.

## Introduction to Anishinaabemowin (NSW135) (3 credits)

This course will introduce students to Anishinaabemowin, one of the oldest languages in North America that was originally passed down orally from elders to younger generations. Students will learn the basic skills of listening, speaking, writing and reading introductory words and phrases. Through practical application students will also learn the connection language has to spirituality, stories, songs and oral traditions. Concepts of the Medicine Wheel and the Seven Grandfather teachers will guide students to be able to use basic words and phrases that reflect the Anishinaabe good life, values and beliefs, and traditions. This is an introductory course and prior knowledge of the Anishinaabe language is not required.

## Introduction to Trauma Informed Care (SSW126) (3 credits)

Social Service Work practice involves working with marginalized individuals, families, groups and communities on micro, mezzo and macro levels in a range of roles and within a variety of organizational and community contexts. The experience of trauma is not uncommon in the lives of those that SSW?s

support, and in the communities that SSW?s strive to support and create positive change within. This course is introductory and will introduce the description and scope of trauma and its impact on individuals, families and communities. Subsequent courses will build on the foundational knowledge.

## Human Behaviour and Social Environment (NSW111) (3 credits)

A paradigm is a combination of concepts, values, assumptions, and practices that represent a way of understanding and relating to the world around us. This course will provide students the opportunity to examine and compare both traditional and alternative paradigms to inspect the correlation of human behaviour and the social environment. Students explore their understanding of the person in the environment to develop an increased awareness of multiculturalism and diversity. Through this examination, students become exposed to the complex aspects of individual, family, community and global relations.

## Semester 2

## S.S.W. Documentation and Record Keeping (CMM235) (3 credits)

Record keeping is essential to social service work practice, and reflects professional values and legal and ethical obligations. Documentation supports professional observations, assessment and intervention strategies, and promotes integrated care and delivery of services that address client goals. In this course, students critically approach client interactions and produce documentation that is objective, culturally safe, and client centred. Emphasis is placed on research and applied writing skills reflective of the SSW profession, workplace practices, and legal frameworks relevant to Ontario. Through documentation, students further develop their professional skills and competence in strengths-based, anti-oppressive practice.

## Capacity Building for Communities (NSW102) (4 credits)

The concept of community is intrinsically tied to the Native cultural identity. Collective identity can be empowering or the target of oppression. Community organizers work to help communities build or regain capacity to change and/or grow. Capacity involves attaining knowledge and skills to build and change. Mastering these skills creates a sense of empowerment. Belief in the ability to accomplish change is essential to capacity building.

## Canadian Social Welfare and Indigenous Social Policies (NSW104) (3 credits)

This course will provide an introduction to Canadian social welfare and policies, and Aboriginal Social Policies. Focus at the micro, mezzo and macro levels of Social Service Work are guided directly by social policies. In examining the evolution, devolution and consequences of social policies on the general Canadian population and specifically the Aboriginal population, students gain key pieces of understanding social issues in the context of larger structural pieces. This course will examine `a distinctly Aboriginal perspective on understanding social relations, challenging conventional analysis for...failure to take into account Aboriginal world views and experiences.` (Wotherspoon and Satzewich, xxii, 2000) Critical analyses of historical and current legislation, social policies and practices, related to child welfare, education, health care and criminal justice in Canada will begin development of skills necessary for effective practice.

## The Parallel Worlds of Mental Health (NSW107) (3 credits)

Effective social service work in this area provides knowledgeable guidance and support for individuals and families. Students will gain an education on the multiple aspects and perspectives involved with this population. Parallel worlds of mental health include formal and informal systems, personal and professional realities and multi-cultural components. The course will inform students on mental disorders, available medications and alternative paths. Canadian Mental Health policy and legislation will also be explored.

## Working with Families (NSW125) (4 credits)

This course will examine the family system and methods for approaching family life cycle dilemmas

through a strength based and holistic approach. As a family moves through the family life cycle they will face many development challenges, however, some families will also be faced with more intense challenges, such as abuse. Students will examine the aspects of abuse in the family and recognize the role of advocacy, intervention and prevention by understanding the impacts, patterns and services of abuse within families. In addition students will explore the challenges imposed on the First Nation family system since European contact by learning how the family balanced life through a system of collective responsibilities. In consideration of the diversity of the modern family and the diverse challenges the family system encounters students will discover how the family system can move through family system dilemmas and identify resources that contribute to individual and collective wellness.

## Essential Skills for Social Services (NSW203) (3 credits)

This course covers the fundamental phases and skills required in helping processes. Self-awareness and ethical decision-making contribute to the evolution of a personalized helping style. Integrating knowledge and theory into action during practical self-appraisals, role plays and practice-oriented assignments form the core of this course.

## Lifespan Development (PSY120) (3 credits)

The purpose of this lifespan development course is to examine the interrelationship of the biopsychosocial aspects of ages and stages from birth to late adulthood. Developmental psychology is the study of the processes that shape human development. The goals of studying life span development are description, explanation and optimization of human development throughout a persons entire life. Students will study the interaction between cultural, social and historical impacts and biological maturation to gain a holistic understanding of human development. In addition, to studying human development in a systematic way, students will gain a personal understanding of their own lives in the context of lifespan development.

## Semester 3

## Groups for Multi-Cultural Practice (NSW200) (4 credits)

The field of social work focuses on the person in the environment. Social Services Workers will consistently use skills related to group dynamics in their work with clients, colleagues and communities. This course will cover the various types of groups and techniques necessary to work effectively with groups. The unique considerations for work with multicultural groups will be addressed. Students will gain an understanding of the differences between the concepts of professional groups and circles.

## Fieldwork Seminar for Social Service I (NSW205) (3 credits)

Fieldwork Seminar I provides the students with an opportunity to meet as a group to share their fieldwork experience. This course is designed to integrate students' increased awareness and understanding of professional self, workplace expectations, ethics and professionalism. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

## Fieldwork Placement for Social Services I (NSW208) (7 credits)

There are several significant hands-on experiences which enhance academic learning. The opportunity to apply acquired skills and to be exposed to the working environment is critical to the successful completion of a balanced education. Students in the Social Services Worker-Native Specialization (SSW-NS) Program will gain an awareness of the skills required and challenges evident in the field of social services. The placement experience should be marked by self-initiative and active participation on the part of students.

Students will be placed in local Native and non-Native services in urban and First Nation Communities for two days per week for a total of 150 hours. During this time, they will actively participate as a service team member, within guidelines set by agencies and fieldwork supervisors. Students in the SSW-NS program become familiar with the agency in context of the network of services available to apply skills and address a variety of issues in our communities.

## Incorporating Indigenous Healing Methods into Practice (NSW214) (4 credits)

Through an experiential learning approach, students will explore how to incorporate Aboriginal healing methods in social service work practice. Throughout the semester, students will be exposed to different traditional healing methods within Aboriginal cultures including the use of medicines, ceremonies, sharing circles, and traditional healers to achieve spiritual, mental, physical and emotional balance. This course involves hands on experience with medicines and instruction on how to use traditional teachings with clients.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

## Semester 4

## Fieldwork Placement - Social Services II (NSW212) (11 credits)

Fieldwork Placement II builds on the orientation process of Fieldwork Placement I. During the final semester students will apply their acquired skills and knowledge in the placement setting by contributing as an active member of the organization. The placement experience will rely on the student's increased initiative and self-awareness as a professional helper. Students will demonstrate their core social service worker skills and apply the concepts of the Seven Grandfathers and the Medicine Wheel into their framework of practice.

## Fieldwork Seminar For Social Services II (NSW216) (3 credits)

Fieldwork Seminar II provides the students with an opportunity to meet as a group to share their fieldwork experience. This course promotes the incorporation of self-initiative and personal responsibility to the workplace and ultimately, the community. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

## Crisis Intervention (NSW221) (3 credits)

Informed and confident contact is the most effective way to serve clients in crises. In this course, students will be introduced to the theory and application of crisis intervention as a problem-solving approach to crisis resolution. The crisis intervention mode will be applied within the framework of various crises.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Social Service Worker - Indigenous Specialization (Thunder Bay)

Section B.111 6/2/2020

Ontario College Diploma (2 Years - 5 Semesters ) (1223) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## 

## **PROGRAM OVERVIEW**

The Social Service Worker - Indigenous Specialization program is for anyone who is interested in gaining the skills of a social service worker as you advocate for social justice in both Aboriginal and mainstream organizations to help empower individuals, families, and communities. You will be equipped with the enhanced knowledge needed to provide all clients - both Aboriginal and non-Aboriginals alike, the support they need to overcome barriers they may face in their lives.

With a strong foundation in core social service worker skills, the program infuses an Aboriginal worldview throughout the curriculum. Whether you are Aboriginal or not, this impactful program will prepare you to become a skilled social service worker, practise within a culturally competent approach, and demonstrate an increased knowledge of Aboriginal issues and interventions. You will be eligible to register with the College of Social Work and Social Service Workers after completing the program.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

## **PROGRAM OUTCOMES**

## A graduate of the Social Service Worker Indigenous Specialization Program at Sault College will reliably demonstrate the ability to:

1. develop respectful and collaborative professional and interpersonal relationships that adhere to professional, legal, and ethical standards aligned to social service work.

2. record information accurately and communicate effectively in written, digital, verbal and non-verbal ways, in adherence to privacy and freedom of information legislation, in accordance with professional and workplace standards.

3. integrate a practice framework within a service delivery continuum, addressing the needs of individuals, families and communities at micro, mezzo, macro and global levels, and work with them in achieving their goals.

4. plan and implement accessible and responsive programs and services, recognizing the diverse needs and experiences of individuals, groups, families and communities, and meeting these needs.

5. examine current social policy, relevant legislation, and political, social, historical, and/or economic systems and their impacts for individuals and communities when delivering services to the user/client.

6. develop strategies and approaches that support individual clients, groups, families and communities in building the capacity for self-advocacy, while affirming their dignity and self-worth.

7. work from an anti-oppressive, strengths-based practice, recognizing the capacity for resilience and growth of individuals and communities when responding to the diverse needs of marginalized or vulnerable populations to act as allies and advocates.

8. develop strategies and approaches to implement and maintain holistic self-care as a member of a human service profession.

9. work with individuals, groups, families and their communities to ensure that service provider strategies promote social and economic justice, and challenge patterns of oppression, discrimination and harassment, and sexual violence with clients, coworkers and communities.

10. develop the capacity to work with the Indigenous individual, families, groups and communities while respecting their inherent rights to self-determine, and to identify and address systemic barriers that produce ill-effects, developing appropriate responses using approaches such as trauma informed care practice.

11. respectfully collaborate with Indigenous individuals, families and communities to facilitate change considering the historical impact of legislation and social systems on the Indigenous Canadian culture and experience.

12. integrate culturally appropriate strategies and Indigenous methods of healing practices to help empower individuals and communities to solution build within an aboriginal worldview and context.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status.

A mature student is someone who is 19 years of age or older by the first day of College and has not graduated from high school. You can still apply to the program and you have two options:

- You can pay \$25 to write the Canadian Academic Achievement Test (CAAT) for Math and/or English requirements only or
- You can take Academic Upgrading for free to get your high school equivalency for Grade 12 English (college level).

If you have graduated from high school but haven't been to school in a while, you are an adult learner. You still may want to consider free Academic Upgrading offered on campus to re-fresh your skills before the start of your program.

## **CAREER PATHS**

As a Social Service Worker - Indigenous Specialization (SSW-IS) graduate you may find employment a variety of private, governmental, and Indigenous Specific programs in areas of mental health, education, addictions, outreach, family services and social welfare.

As a graduate of the program you would bring the core skills required of a social service worker professional with a level of cultural competence to provide culturally appropriate services.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$837.00	N/A	N/A

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **CLINICAL/LAB OR FIELD PLACEMENTS**

## **Apply What You Learn**

In the second year of this program, you will be able to gain valuable work experience and apply the things you learn in class by visiting and working in agencies, treatment centres, youth facilities, women's drop-in centres, and other places where you can apply the skills you learn while studying with us. You will participate in a total of 550 hours of field placement in social service work settings during your second year.

You will need to complete and bring in certain forms at least one week before being scheduled to start your field work. Information regarding the requirements you will need will be sent to you once you are accepted into the program.

## **Mandatory Field Placement Requirements**

You will need to do a police records search as soon as possible as you will be working with vulnerable persons during your placements. There is a cost to having this done and this can take a few weeks to months to complete. If you have criminal records please contact 705.759.2554 ext. 2560 for further discussion to determine whether a criminal record will affect the fieldwork requirement. Current Tetanus-diphtheria First Aid Certificate and CPR Level C WHMIS (Workplace Hazardous Materials Information System)

Recommended: Hep-B Vaccination is encouraged Current Influenza immunization encouraged

There is a cost to taking some of these tests, and you will have to pay for these. Finally, you will need to have a G.P.A. of 2.0 or higher in order to be considered for placement.

## **EDUCATIONAL PATHS**

## **Professional Designation**

As a graduate of the Social Service Worker-Indigenous Specialization program you will be eligible for registration with the Ontario College of Social Workers and Social Service Workers (OCSWSSW) <u>http://www.ocswssw.org/en/default.htm</u>, subject to applicable fees and membership requirements. The OCSWSSW is a professional regulatory body which recognizes and regulates the social work and social service work profession, creating standards of practice and a professional designation for anyone with the designation of social worker or social service worker.

## **Employment Opportunities**

Upon graduation, you will bring a unique voice to your career that reflects a distinct set of knowledge and skills, demonstrating competence in the social services workers skill areas with a specialized focus on issues

affecting Aboriginal people. You may find jobs in private, governmental and First Nation programs in areas such as mental health, education, youth detention, addictions, outreach, family services and social welfare with individuals, families and communities.

## **Further Education**

Past graduates of the program have gone on to university in areas of social work, sociology, community development, teaching as well as specialized in addictions or Anishinaabemowin & Indigenous Studies. Each university may differ on which credits transfer and are eligible for advanced credit. You are encouraged to research your university of choice to determine if current articulation agreements are in place or how that university recognizes college credits.

As a graduate, you will also have the option of earning a three year Child & Youth Care Diploma in only two academic years. This dual diploma option is available according to a predetermined educational map that provides you with one full year of advanced standing in the CYC program at Sault College.

## **OTHER INFORMATION**

This program is delivered off campus in Thunder Bay, ON.

Please Note: This is the new program name and program number for students entering the program in September 2019. It was formerly called Social Services Worker - Native Specialization - Program 1218.

For more information contact Program Coordinator Michelle Proulx at 705.759.2554, ext 2449 or email michelle.proulx@saultcollege.ca.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM110-3 College Communication Skills NSW101-3 Foundations for Balanced Practice NSW105-3 Fieldwork Placement 1A NSW106-1 Fieldwork Seminar 1A NSW107-3 The Parallel Worlds of Mental Health PSY120-3 Lifespan Development

Select one of the following: GEN110: Student Selected General Education

## **SEMESTER 2**

NSW104-3 Canadian Social Welfare and Indigenous Social Policies NSW114-3 Understanding Indigenous Wellness in Canada NSW116-1 Fieldwork Seminar 1B NSW120-4 Fieldwork Placement 1B NSW125-4 Working with Families NSW111-3 Human Behaviour and Social Environment

## **SEMESTER 3**

NSW100-3 Addictions: Individuals, Family and Community NSW203-3 Essential Skills for Social Services NSW217-2 Groups for a Multicultural Practice I NSW250-3 Fieldwork Placement for Social Services II A NSW253-1 Fieldwork Seminar for Social Services II A GEN100-3 Global Citizenship

## **SEMESTER 4**

CMM235-3 S.S.W. Documentation and Record Keeping NSW135-3 Introduction to Anishinaabemowin NSW214-4 Incorporating Indigenous Healing Methods into Practice NSW227-2 Groups for a Multicultural Practice II NSW251-4 Fieldwork Placement for Social Services II B NSW254-1 Fieldwork Seminar II B

## **SEMESTER 5**

NSW102-4 Capacity Building for Communities NSW221-3 Crisis Intervention NSW252-4 Fieldwork Placement II C NSW255-1 Fieldwork Seminar II C

## **Course Descriptions**

## Semester 1

#### College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

## Foundations for Balanced Practice (NSW101) (3 credits)

The belief in the need for balance in work and personal life is at the core of this course. Students will learn to assess strengths and limitations from individual and community perspectives. Alternative outlooks on problem solving, self-concept and growth will be explored. The teachings of the Sacred Tree will provide a basis for course work.

## Fieldwork Placement 1A (NSW105) (3 credits)

The opportunity to apply acquired skills and to be exposed to the working environment is critical to the successful completion of a balanced education. Students in the Social Service Worker - Native Specialization Program will gain an awareness of the skills required and challenges evident in the field of social services. The placement experience should be marked by self-initiative and active participation on the part of students.

## Fieldwork Seminar 1A (NSW106) (1 credits)

Fieldwork Seminar 1A provides the students with an opportunity to meet as a group to share their fieldwork experience. This course is designed to integrate students' increased awareness and understanding of professional self, workplace expectations, ethics and professionalism. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

## The Parallel Worlds of Mental Health (NSW107) (3 credits)

Effective social service work in this area provides knowledgeable guidance and support for individuals and families. Students will gain an education on the multiple aspects and perspectives involved with this population. Parallel worlds of mental health include formal and informal systems, personal and professional realities and multi-cultural components. The course will inform students on mental disorders, available medications and alternative paths. Canadian Mental Health policy and legislation will also be

explored.

## Lifespan Development (PSY120) (3 credits)

The purpose of this lifespan development course is to examine the interrelationship of the biopsychosocial aspects of ages and stages from birth to late adulthood. Developmental psychology is the study of the processes that shape human development. The goals of studying life span development are description, explanation and optimization of human development throughout a persons entire life. Students will study the interaction between cultural, social and historical impacts and biological maturation to gain a holistic understanding of human development. In addition, to studying human development in a systematic way, students will gain a personal understanding of their own lives in the context of lifespan development.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

## Semester 2

## Canadian Social Welfare and Indigenous Social Policies (NSW104) (3 credits)

This course will provide an introduction to Canadian social welfare and policies, and Aboriginal Social Policies. Focus at the micro, mezzo and macro levels of Social Service Work are guided directly by social policies. In examining the evolution, devolution and consequences of social policies on the general Canadian population and specifically the Aboriginal population, students gain key pieces of understanding social issues in the context of larger structural pieces. This course will examine `a distinctly Aboriginal perspective on understanding social relations, challenging conventional analysis for...failure to take into account Aboriginal world views and experiences.` (Wotherspoon and Satzewich, xxii, 2000) Critical analyses of historical and current legislation, social policies and practices, related to child welfare, education, health care and criminal justice in Canada will begin development of skills necessary for effective practice.

## Understanding Indigenous Wellness in Canada (NSW114) (3 credits)

This course will provide students with an in-depth examination of Aboriginal history, worldview and culture in Canada. By exploring pre-contact and colonial history students will gain an understanding of the experiences and impacts on Aboriginal wellness and identity. Students will also discover how wellness is impacted as they explore contemporary issues relating to Aboriginal and government relations, such as policies rights and responsibilities.

## Fieldwork Seminar 1B (NSW116) (1 credits)

Fieldwork Seminar 1B provides the students with an opportunity to meet as a group to share their fieldwork experience. This course is designed to integrate students` increased awareness and understanding of professional self, workplace expectations, ethics and professionalism. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

## Fieldwork Placement 1B (NSW120) (4 credits)

The opportunity to apply acquired skills and to be exposed to the working environment is critical to the successful completion of a balanced education. Students in the Social Service Worker - Native Specialization Program will gain an awareness of the skills required and challenges evident in the field of social services. The placement experience should be marked by self-initiative and active participation on the part of students.

## Working with Families (NSW125) (4 credits)

This course will examine the family system and methods for approaching family life cycle dilemmas through a strength based and holistic approach. As a family moves through the family life cycle they will

face many development challenges, however, some families will also be faced with more intense challenges, such as abuse. Students will examine the aspects of abuse in the family and recognize the role of advocacy, intervention and prevention by understanding the impacts, patterns and services of abuse within families. In addition students will explore the challenges imposed on the First Nation family system since European contact by learning how the family balanced life through a system of collective responsibilities. In consideration of the diversity of the modern family and the diverse challenges the family system encounters students will discover how the family system can move through family system dilemmas and identify resources that contribute to individual and collective wellness.

## Human Behaviour and Social Environment (NSW111) (3 credits)

A paradigm is a combination of concepts, values, assumptions, and practices that represent a way of understanding and relating to the world around us. This course will provide students the opportunity to examine and compare both traditional and alternative paradigms to inspect the correlation of human behaviour and the social environment. Students explore their understanding of the person in the environment to develop an increased awareness of multiculturalism and diversity. Through this examination, students become exposed to the complex aspects of individual, family, community and global relations.

## Semester 3

## Addictions: Individuals, Family and Community (NSW100) (3 credits)

An addiction interferes with the healthy lifestyle of an individual, their family and their community. Students will gain an understanding of the impact of addictions on the physical, social, mental, spiritual and emotional aspects related to the consequences of addictive behaviours with theoretical and practical applications.

## Essential Skills for Social Services (NSW203) (3 credits)

This course covers the fundamental phases and skills required in helping processes. Self-awareness and ethical decision-making contribute to the evolution of a personalized helping style. Integrating knowledge and theory into action during practical self-appraisals, role plays and practice-oriented assignments form the core of this course.

## Groups for a Multicultural Practice I (NSW217) (2 credits)

The field of social work focuses on the person in the environment. Social Services Workers will consistently use skills related to group dynamics in their work with clients, colleagues and communities. This course will cover the various types of groups and techniques necessary to work effectively with groups. The unique considerations for work with multicultural groups will be addressed. Students will gain an understanding of the differences between the concepts of professional groups and circles.

## Fieldwork Placement for Social Services II A (NSW250) (3 credits)

Fieldwork Placement II builds on the orientation process of Fieldwork Placement I. During the final semester students will apply their acquired skills and knowledge in the placement setting by contributing as an active member of the organization. The placement experience will rely on the student's increased initiative and self-awareness of a professional helper. Students will demonstrate their core social service worker skills and apply the concepts of the Seven Grandfathers and the Medicine Wheel into their framework of practice.

## Fieldwork Seminar for Social Services II A (NSW253) (1 credits)

Fieldwork Seminar II A provides the students with an opportunity to meet as a group to share their fieldwork experience. This course promotes the incorporation of self-initiative and personal responsibility to the workplace and ultimately, the community. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 4

## S.S.W. Documentation and Record Keeping (CMM235) (3 credits)

Record keeping is essential to social service work practice, and reflects professional values and legal and ethical obligations. Documentation supports professional observations, assessment and intervention strategies, and promotes integrated care and delivery of services that address client goals. In this course, students critically approach client interactions and produce documentation that is objective, culturally safe, and client centred. Emphasis is placed on research and applied writing skills reflective of the SSW profession, workplace practices, and legal frameworks relevant to Ontario. Through documentation, students further develop their professional skills and competence in strengths-based, anti-oppressive practice.

## Introduction to Anishinaabemowin (NSW135) (3 credits)

This course will introduce students to Anishinaabemowin, one of the oldest languages in North America that was originally passed down orally from elders to younger generations. Students will learn the basic skills of listening, speaking, writing and reading introductory words and phrases. Through practical application students will also learn the connection language has to spirituality, stories, songs and oral traditions. Concepts of the Medicine Wheel and the Seven Grandfather teachers will guide students to be able to use basic words and phrases that reflect the Anishinaabe good life, values and beliefs, and traditions. This is an introductory course and prior knowledge of the Anishinaabe language is not required.

## Incorporating Indigenous Healing Methods into Practice (NSW214) (4 credits)

Through an experiential learning approach, students will explore how to incorporate Aboriginal healing methods in social service work practice. Throughout the semester, students will be exposed to different traditional healing methods within Aboriginal cultures including the use of medicines, ceremonies, sharing circles, and traditional healers to achieve spiritual, mental, physical and emotional balance. This course involves hands on experience with medicines and instruction on how to use traditional teachings with clients.

## Groups for a Multicultural Practice II (NSW227) (2 credits)

The field of social work focuses on the person in the environment. Social Services Workers will consistently use skills related to group dynamics in their work with clients, colleagues and communities. This course will cover the various types of groups and techniques necessary to work effectively with groups. The unique considerations for work with multicultural groups will be addressed. Students will gain an understanding of the differences between the concepts of professional groups and circles.

## Fieldwork Placement for Social Services II B (NSW251) (4 credits)

Fieldwork Placement II builds on the orientation process of Fieldwork Placement I. During the final semester students will apply their acquired skills and knowledge in the placement setting by contributing as an active member of the organization. The placement experience will rely on the student's increased initiative and self-awareness as a professional helper. Students will demonstrate their core social service worker skills and apply the concepts of the Seven Grandfathers and the Medicine Wheel into their framework of practice.

## Fieldwork Seminar II B (NSW254) (1 credits)

Fieldwork Seminar II B provides the students with an opportunity to meet as a group to share their fieldwork experience. This course promotes the incorporation of self-initiative and personal responsibility to the workplace and ultimately, the community. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

## Semester 5

## Capacity Building for Communities (NSW102) (4 credits)

The concept of community is intrinsically tied to the Native cultural identity. Collective identity can be empowering or the target of oppression. Community organizers work to help communities build or regain capacity to change and/or grow. Capacity involves attaining knowledge and skills to build and change. Mastering these skills creates a sense of empowerment. Belief in the ability to accomplish change is essential to capacity building.

## Crisis Intervention (NSW221) (3 credits)

Informed and confident contact is the most effective way to serve clients in crises. In this course, students will be introduced to the theory and application of crisis intervention as a problem-solving approach to crisis resolution. The crisis intervention mode will be applied within the framework of various crises.

## Fieldwork Placement II C (NSW252) (4 credits)

Fieldwork placement II builds on the orientation process of Fieldwork Placement I. During the final semester students will apply their acquired skills and knowledge in the placement setting by contributing as an active member of the organization. The placement experience will rely on the student's increased initiative and self-awareness as a professional helper. Students will demonstrate their core social service worker skills and apply the concepts of the Seven Grandfathers and the Medicine Wheel into their framework of practice.

## Fieldwork Seminar II C (NSW255) (1 credits)

Fieldwork Seminar II C provides the students with an opportunity to meet as a group to share their fieldwork experience. This course promotes the incorporation of self-initiative and personal responsibility to the workplace and ultimately, the community. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

# Social Service Worker - Native Specialization (Thunder Bay)

Section B.112 6/2/2020

Ontario College Diploma (2 Years - 5 Semesters ) (1218) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

The Social Service Worker - Native Specialization program is for anyone who is interested in gaining the skills of a social service worker as you advocate for social justice in both Aboriginal and mainstream organizations to help empower individuals, families, and communities. You will be equipped with the enhanced knowledge needed to provide all clients - both Aboriginal and non-Aboriginals alike, the support they need to overcome barriers they may face in their lives.

With a strong foundation in core social service worker skills, the program infuses an Aboriginal worldview throughout the curriculum. Whether you are Aboriginal or not, this impactful program will prepare you to become a skilled social service worker, practise within a culturally competent approach, and demonstrate an increased knowledge of Aboriginal issues and interventions. You will be eligible to register with the College of Social Work and Social Service Workers after completing the program.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

## **PROGRAM OUTCOMES**

## A graduate of the Social Service Worker?Native Specialization Program at Sault College will reliably demonstrate the ability to:

1. develop and maintain professional relationships which adhere to professional, legal, and ethical standards aligned to social service work.

2. identify strengths, resources, and challenges of individuals, families, groups, and communities to assist them in achieving their goals.

3. recognize diverse needs and experiences of individuals, groups, families, and communities to promote accessible and responsive programs and services.

4. identify current social policy, relevant legislation, and political, social, and/or economic systems and their impacts on service delivery.

5. advocate for appropriate access to resources to assist individuals, families, groups, and communities.

6. develop and maintain positive working relationships with colleagues, supervisors, and community partners.

7. develop strategies and plans that lead to the promotion of self-care, improved job performance, and enhanced work relationships.

8. integrate social group work and group facilitation skills across a wide range of environments, supporting

growth and development of individuals, families, and communities.

9. work in communities to advocate for change strategies that promote social and economic justice and challenge patterns of oppression and discrimination.

10. Respectfully collaborate with Indigenous individuals, families and communities to facilitate change considering the historical impact of legislation and social systems on the Indigenous Canadian culture and experience.

11. Integrate culturally appropriate strategies and Indigenous methods of healing practices to help empower individuals and communities to solution build within an aboriginal worldview and context.

#### Reference

Ministry of Training, Colleges and Universities Social Service Worker Program Standards (MTCU 50721, March 2007; two additional VLOs approved by CVS 2015 for Native Specialization)

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status.

A mature student is someone who is 19 years of age or older by the first day of College and has not graduated from high school. You can still apply to the program and you have two options:

- You can pay \$25 to write the Canadian Academic Achievement Test (CAAT) for Math and/or English requirements only or
- You can take Academic Upgrading for free to get your high school equivalency for Grade 12 English (college level).

If you have graduated from high school but haven't been to school in a while, you are an adult learner. You still may want to consider free Academic Upgrading offered on campus to re-fresh your skills before the start of your program.

## **CAREER PATHS**

As a Social Service Worker - Native Specialization (SSW-NS) graduate you may find employment a variety of private, governmental, and Native Specific programs in areas of mental health, education, addictions, outreach, family services and social welfare.

As a graduate of the program you would bring the core skills required of a social service worker professional with a level of cultural competence to provide culturally appropriate services.

## **CLINICAL/LAB OR FIELD PLACEMENTS**

## **Apply What You Learn**

In the second year of this program, you will be able to gain valuable work experience and apply the things you learn in class by visiting and working in agencies, treatment centres, youth facilities, women's drop-in centres, and other places where you can apply the skills you learn while studying with us. You will participate in a total of 550 hours of field placement in social service work settings during your second

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You will need to complete and bring in certain forms at least one week before being scheduled to start your field work. Information regarding the requirements you will need will be sent to you once you are accepted into the program.

#### **Mandatory Field Placement Requirements**

You will need to do a police records search as soon as possible as you will be working with vulnerable persons during your placements. There is a cost to having this done and this can take a few weeks to months to complete. If you have criminal records please contact 705.759.2554 ext. 2560 for further discussion to determine whether a criminal record will affect the fieldwork requirement. Current Tetanus-diphtheria First Aid Certificate and CPR Level C WHMIS (Workplace Hazardous Materials Information System)

Recommended: Hep-B Vaccination is encouraged Current Influenza immunization encouraged

There is a cost to taking some of these tests, and you will have to pay for these. Finally, you will need to have a G.P.A. of 2.0 or higher in order to be considered for placement.

## **EDUCATIONAL PATHS**

#### **Professional Designation**

As a graduate of the Social Service Worker-Native Specialization program you will be eligible for registration with the Ontario College of Social Workers and Social Service Workers (OCSWSSW) <u>http://www.ocswssw.org/en/default.htm</u>, subject to applicable fees and membership requirements. The OCSWSSW is a professional regulatory body which recognizes and regulates the social work and social service work profession, creating standards of practice and a professional designation for anyone with the designation of social worker or social service worker.

#### **Employment Opportunities**

Upon graduation, you will bring a unique voice to your career that reflects a distinct set of knowledge and skills, demonstrating competence in the social services workers skill areas with a specialized focus on issues affecting Aboriginal people. You may find jobs in private, governmental and First Nation programs in areas such as mental health, education, youth detention, addictions, outreach, family services and social welfare with individuals, families and communities.

#### **Further Education**

Past graduates of the program have gone on to university in areas of social work, sociology, community development, teaching as well as specialized in addictions or Anishinaabemowin & Indigenous Studies. Each university may differ on which credits transfer and are eligible for advanced credit. You are encouraged to research your university of choice to determine if current articulation agreements are in place or how that university recognizes college credits.

As a graduate, you will also have the option of earning a three year Child & Youth Care Diploma in only two academic years. This dual diploma option is available according to a predetermined educational map that provides you with one full year of advanced standing in the CYC program at Sault College.

## **OTHER INFORMATION**

This program is delivered off campus in Thunder Bay, ON.

Effective for the September 2019 intake of this program, students wishing to apply to the program must apply to <u>Program 1223.</u>

For more information contact Program Coordinator Michelle Proulx at 705.759.2554, ext 2449 or email michelle.proulx@saultcollege.ca.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM110-3 College Communication Skills NSW101-3 Foundations for Balanced Practice NSW105-3 Fieldwork Placement 1A NSW106-1 Fieldwork Seminar 1A NSW107-3 The Parallel Worlds of Mental Health PSY120-3 Lifespan Development

#### Select one of the following:

GEN110: Student Selected General Education

#### **SEMESTER 2**

NSW104-3 Canadian Social Welfare and Indigenous Social Policies NSW114-3 Understanding Indigenous Wellness in Canada NSW116-1 Fieldwork Seminar 1B NSW120-4 Fieldwork Placement 1B NSW125-4 Working with Families NSW111-3 Human Behaviour and Social Environment

#### **SEMESTER 3**

NSW100-3 Addictions: Individuals, Family and Community NSW203-3 Essential Skills for Social Services NSW215-1 Fieldwork Seminar II A NSW217-2 Groups for a Multicultural Practice I NSW220-4 Fieldwork Placement II A GEN100-3 Global Citizenship

#### **SEMESTER 4**

CMM225-3 Human Services Communication NSA135-3 Anishinaabemowin - Conversational NSW214-4 Incorporating Indigenous Healing Methods into Practice NSW225-1 Fieldwork Seminar II B NSW227-2 Groups for a Multicultural Practice II NSW230-4 Fieldwork Placement II B

#### **SEMESTER 5**

NSW102-4 Capacity Building for Communities NSW221-3 Crisis Intervention NSW232-2 Fieldwork Seminar II C NSW240-7 Fieldwork Placement II C

## **Course Descriptions**

Semester 1

#### College Communication Skills (CMM110) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning of messages and respond appropriately; produce coherent, clear paragraphs and essays; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Foundations for Balanced Practice (NSW101) (3 credits)

The belief in the need for balance in work and personal life is at the core of this course. Students will learn to assess strengths and limitations from individual and community perspectives. Alternative outlooks on problem solving, self-concept and growth will be explored. The teachings of the Sacred Tree will provide a basis for course work.

#### Fieldwork Placement 1A (NSW105) (3 credits)

The opportunity to apply acquired skills and to be exposed to the working environment is critical to the successful completion of a balanced education. Students in the Social Service Worker - Native Specialization Program will gain an awareness of the skills required and challenges evident in the field of social services. The placement experience should be marked by self-initiative and active participation on the part of students.

#### Fieldwork Seminar 1A (NSW106) (1 credits)

Fieldwork Seminar 1A provides the students with an opportunity to meet as a group to share their fieldwork experience. This course is designed to integrate students' increased awareness and understanding of professional self, workplace expectations, ethics and professionalism. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

## The Parallel Worlds of Mental Health (NSW107) (3 credits)

Effective social service work in this area provides knowledgeable guidance and support for individuals and families. Students will gain an education on the multiple aspects and perspectives involved with this population. Parallel worlds of mental health include formal and informal systems, personal and professional realities and multi-cultural components. The course will inform students on mental disorders, available medications and alternative paths. Canadian Mental Health policy and legislation will also be explored.

#### Lifespan Development (PSY120) (3 credits)

The purpose of this lifespan development course is to examine the interrelationship of the biopsychosocial aspects of ages and stages from birth to late adulthood. Developmental psychology is the study of the processes that shape human development. The goals of studying life span development are description, explanation and optimization of human development throughout a persons entire life. Students will study the interaction between cultural, social and historical impacts and biological maturation to gain a holistic understanding of human development. In addition, to studying human development in a systematic way, students will gain a personal understanding of their own lives in the context of lifespan development.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 2

Canadian Social Welfare and Indigenous Social Policies (NSW104) (3 credits)

This course will provide an introduction to Canadian social welfare and policies, and Aboriginal Social Policies. Focus at the micro, mezzo and macro levels of Social Service Work are guided directly by social policies. In examining the evolution, devolution and consequences of social policies on the general Canadian population and specifically the Aboriginal population, students gain key pieces of understanding social issues in the context of larger structural pieces. This course will examine `a distinctly Aboriginal perspective on understanding social relations, challenging conventional analysis for...failure to take into account Aboriginal world views and experiences.` (Wotherspoon and Satzewich, xxii, 2000) Critical analyses of historical and current legislation, social policies and practices, related to child welfare, education, health care and criminal justice in Canada will begin development of skills necessary for effective practice.

#### Understanding Indigenous Wellness in Canada (NSW114) (3 credits)

This course will provide students with an in-depth examination of Aboriginal history, worldview and culture in Canada. By exploring pre-contact and colonial history students will gain an understanding of the experiences and impacts on Aboriginal wellness and identity. Students will also discover how wellness is impacted as they explore contemporary issues relating to Aboriginal and government relations, such as policies rights and responsibilities.

#### Fieldwork Seminar 1B (NSW116) (1 credits)

Fieldwork Seminar 1B provides the students with an opportunity to meet as a group to share their fieldwork experience. This course is designed to integrate students' increased awareness and understanding of professional self, workplace expectations, ethics and professionalism. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

#### Fieldwork Placement 1B (NSW120) (4 credits)

The opportunity to apply acquired skills and to be exposed to the working environment is critical to the successful completion of a balanced education. Students in the Social Service Worker - Native Specialization Program will gain an awareness of the skills required and challenges evident in the field of social services. The placement experience should be marked by self-initiative and active participation on the part of students.

#### Working with Families (NSW125) (4 credits)

This course will examine the family system and methods for approaching family life cycle dilemmas through a strength based and holistic approach. As a family moves through the family life cycle they will face many development challenges, however, some families will also be faced with more intense challenges, such as abuse. Students will examine the aspects of abuse in the family and recognize the role of advocacy, intervention and prevention by understanding the impacts, patterns and services of abuse within families. In addition students will explore the challenges imposed on the First Nation family system since European contact by learning how the family balanced life through a system of collective responsibilities. In consideration of the diversity of the modern family and the diverse challenges the family system encounters students will discover how the family system can move through family system dilemmas and identify resources that contribute to individual and collective wellness.

#### Human Behaviour and Social Environment (NSW111) (3 credits)

A paradigm is a combination of concepts, values, assumptions, and practices that represent a way of understanding and relating to the world around us. This course will provide students the opportunity to examine and compare both traditional and alternative paradigms to inspect the correlation of human behaviour and the social environment. Students explore their understanding of the person in the environment to develop an increased awareness of multiculturalism and diversity. Through this examination, students become exposed to the complex aspects of individual, family, community and global relations.

#### Semester 3

#### Addictions: Individuals, Family and Community (NSW100) (3 credits)

An addiction interferes with the healthy lifestyle of an individual, their family and their community. Students will gain an understanding of the impact of addictions on the physical, social, mental, spiritual and emotional aspects related to the consequences of addictive behaviours with theoretical and practical applications.

#### Essential Skills for Social Services (NSW203) (3 credits)

This course covers the fundamental phases and skills required in helping processes. Self-awareness and ethical decision-making contribute to the evolution of a personalized helping style. Integrating knowledge and theory into action during practical self-appraisals, role plays and practice-oriented assignments form the core of this course.

#### Fieldwork Seminar II A (NSW215) (1 credits)

Fieldwork Seminar II A provides the students with an opportunity to meet as a group to share their fieldwork experience. This course promotes the incorporation of self-initiative and personal responsibility to the workplace and ultimately, the community. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

## Groups for a Multicultural Practice I (NSW217) (2 credits)

The field of social work focuses on the person in the environment. Social Services Workers will consistently use skills related to group dynamics in their work with clients, colleagues and communities. This course will cover the various types of groups and techniques necessary to work effectively with groups. The unique considerations for work with multicultural groups will be addressed. Students will gain an understanding of the differences between the concepts of professional groups and circles.

#### Fieldwork Placement II A (NSW220) (4 credits)

The opportunity to apply acquired skills and to be exposed to the working environment is critical to the successful completion of a balanced education. Graduates of the Social Service Worker - Native Specialization Program will become a part of the growing social services field, which works to benefit members of the urban and First Nation communities. The placement experience should be marked by increased self-initiative and active participation on the part of students.

#### **Global Citizenship** (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 4

## Human Services Communication (CMM225) (3 credits)

This course prepares students for employment in the human service professions. Emphasis is placed on career exploration and the production of a variety of written and oral communications suited for the various purposes and audiences relevant to this profession. In this course, the principles of writing are taught through the writing process.

#### Anishinaabemowin - Conversational (NSA135) (3 credits)

This course will concentrate on conversation key sentences, to use at work or social setting. The double vowel method is used. The four language skills: listening, speaking, writing and reading will be incorporated

for each lesson. There will be a variety of activities and interaction with other students. Students will be given the opportunity to participate in an atmosphere that is both entertaining and educational, thus giving a sense of pride in learning this beautiful language and culture. A portion of the course lessons will be the basic Medicine Wheel Teachings. Our goal is to regain and retain Anishinaabemowin language and culture. The course material can be purchased from the Campus Shop.

#### Incorporating Indigenous Healing Methods into Practice (NSW214) (4 credits)

Through an experiential learning approach, students will explore how to incorporate Aboriginal healing methods in social service work practice. Throughout the semester, students will be exposed to different traditional healing methods within Aboriginal cultures including the use of medicines, ceremonies, sharing circles, and traditional healers to achieve spiritual, mental, physical and emotional balance. This course involves hands on experience with medicines and instruction on how to use traditional teachings with clients.

#### Fieldwork Seminar II B (NSW225) (1 credits)

Fieldwork Seminar II B provides the students with an opportunity to meet as a group to share their fieldwork experience. This course promotes the incorporation of self-initiative and personal responsibility to the workplace and ultimately, the community. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their primary instructor.

## Groups for a Multicultural Practice II (NSW227) (2 credits)

The field of social work focuses on the person in the environment. Social Services Workers will consistently use skills related to group dynamics in their work with clients, colleagues and communities. This course will cover the various types of groups and techniques necessary to work effectively with groups. The unique considerations for work with multicultural groups will be addressed. Students will gain an understanding of the differences between the concepts of professional groups and circles.

## Fieldwork Placement II B (NSW230) (4 credits)

The opportunity to apply acquired skills and to be exposed to the working environment is critical to the successful completion of a balanced education. Graduates of the Social Service Worker - Native Specialization Program will become a part of the growing social services field, which works to benefit members of the urban and First Nation communities. The placement experience should be marked by increased self-initiative and active participation on the part of students.

#### Semester 5

## Capacity Building for Communities (NSW102) (4 credits)

The concept of community is intrinsically tied to the Native cultural identity. Collective identity can be empowering or the target of oppression. Community organizers work to help communities build or regain capacity to change and/or grow. Capacity involves attaining knowledge and skills to build and change. Mastering these skills creates a sense of empowerment. Belief in the ability to accomplish change is essential to capacity building.

#### Crisis Intervention (NSW221) (3 credits)

Informed and confident contact is the most effective way to serve clients in crises. In this course, students will be introduced to the theory and application of crisis intervention as a problem-solving approach to crisis resolution. The crisis intervention mode will be applied within the framework of various crises.

## Fieldwork Seminar II C (NSW232) (2 credits)

Fieldwork Seminar II C provides the students with an opportunity to meet as a group to share their fieldwork experience. This course promotes the incorporation of self-initiative and personal responsibility to the workplace and ultimately, the community. In addition, each seminar group will become adept at processing experiences in a concise and effective manner. This is accomplished under the guidance of their

primary instructor.

#### Fieldwork Placement II C (NSW240) (7 credits)

The opportunity to apply acquired skills and to be exposed to the working environment is critical to the successful completion of a balanced education. Graduates of the Social Service Worker - Native Specialization Program will become a part of the growing social services field, which works to benefit members of the urban and First Nation communities. The placement experience should be marked by increased self-initiative and active participation on the part of students.

# **Computer Programmer**

**Ontario College Diploma (2 Years - 4 Semesters ) (2090)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The emphasis in the Computer Programmer diploma program is to give students the necessary computer programming skills to design, develop and implement computer systems. Sault College strives to keep its hardware and software environments as close as possible to industry standards and that is reflected in the lab environment where a mix of platforms exists to support curriculum objectives. Students will develop their skills using a variety of programming languages in current use including C++, Python, C# .NET, Java and scripting languages, such as JavaScript, and apply those skills to the writing of standalone and web-based DBMS applications.

Other courses relate to the design and implementation of databases, client server systems, mobile applications, systems analysis and design, and web-based systems. The program prides itself on highly motivated and qualified professors.

The Computer Programming graduate may have the option of continuing into the Computer Programmer/Analyst program (2091).

Upon completion, the Computer Programmer graduate will be poised for a position in this fast paced and rapidly growing field.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for second career funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

A graduate of the Computer Programmer Program at Sault College will reliably demonstrate the ability to:

1. identify, analyze, develop, implement, verify and document the requirements for a computing environment.

2. contribute to the diagnostics, troubleshooting, documenting and monitoring of technical problems using appropriate methodologies and tools.

3. implement and maintain secure computing environments.

4. implement robust computing system solutions through validation testing that aligns with industry best practices.

5. communicate and collaborate with team members and stakeholders to ensure effective working relationships.

6. select and apply strategies for personal and professional development to enhance work performance.

7. apply project management principles and tools when working on projects within a computing environment.

8. adhere to ethical, legal, and regulatory requirements and/or principles in the development and management of computing solutions and systems.

9. support the analysis and definition of software system specifications based on functional and non-functional requirements.

10. contribute to the development, documentation, implementation, maintenance and testing of software systems by using industry standard software development methodologies based on defined specifications and existing technologies/frameworks.

11. apply one or more programming paradigms such as, object-oriented, structured or functional programming, and design principles, as well as documented requirements, to the software development process.

12. model, design, implement, and maintain basic data storage solutions.

13. contribute to the integration of network communications into software solutions by adhering to protocol standards.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, Grade 12 Foundations for College Math (C) MAP4C, or mature student status.

## **CAREER PATHS**

A strong demand for programmer/analyst graduates exists in a number of different businesses and industries both locally and nationally. Graduates may seek employment in a wide range of positions such as: software development, systems analysis and design, user interface design and human factors, web and database design and programming, project management, system and database administration, end user support, management of technology. Potential for career advancement and portability of skills is high.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

#### **OTHER INFORMATION**

For more information contact Program Coordinator Bazlur Rasheed at 705.759.2554 ext?2668 or email <u>bazlur.rasheed@saultcollege.ca</u>.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CSD105-3 Python CSD120-5 Introduction to Web Development CSO104-5 Introduction to Operating Systems and LAN MTH122-4 Computer Mathematics TNY130-3 Technology in Society

#### **SEMESTER 2**

CSA103-4 Business Applications I CSD102-5 Programming Using C++ CSD212-4 Web Scripting Languages CSO102-4 Introduction to LINUX CST104-4 PC Hardware and Networking

#### **SEMESTER 3**

CMM115-3 Communications I CSD202-5 Systems Analysis and Design CSD203-4 Mobile Applications I CSD207-4 Introduction to C#, .NET and Desktop Applications CSD210-4 Database Modelling CSD211-4 JAVA I GEN100-3 Global Citizenship

#### **SEMESTER 4**

CMM215-3 Business Communication CSD220-4 Database Programming using SQL CSD221-4 JAVA II CSD223-4 Advanced Web Applications CSD331-5 Advanced C# and .Net, Web Applications

#### Select one of the following:

#### GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

## **Course Descriptions**

#### Semester 1

Python (CSD105) (3 credits)

The Python programming language, is an easy-to-learn and increasingly popular object-oriented language, that allows students to become comfortable with the fundamentals of programming without the troublesome syntax that can be challenging for novices. With the knowledge acquired using Python, students gain confidence in their skills and learn to recognize the logic behind developing high-quality programs. The course focuses on the use of variables, program structure, control structures, functions and lists.?

The main objective of the course is to set the foundation for other programming languages throughout the duration of the program.? The focus is not to make you an expert Python programmer, but rather have you recognize the main programming constructs that you will encounter in all programming languages.

#### Introduction to Web Development (CSD120) (5 credits)

A student in this course will learn the basics of the World Wide Web and creating Web Pages. The fundamentals of Web Page creation will be covered including how to: create anchors, attach relative and absolute hyperlinks, linking to other types of documents (such as Word, Excel, Powerpoint, PDF), work with fonts, colours, and graphics as well as a variety of tools to enhance web pages. The web development will be enhanced by the use of: tables, newspaper style layouts, Cascading Style Sheets, dynamic HTML, and forms. If time permits, we will explore JavaScripting and using other enhancing features such as sound, video, Java Applets, and animated features.

#### Introduction to Operating Systems and LAN (CSO104) (5 credits)

This course will introduce students to Client, Server and Virtual Operating systems.

Students will become familiar with Sault College's computing infrastructure regarding security and terms-of-use policies, login/logout procedures, disk storage access and quota, domain access, internet and email usage. Using a virtual Operating System, each student will then proceed to install their own Microsoft Windows 10 that will be configured to interact in a domain environment. Upon completion of Windows 10, students will be introduced to Network Operating Systems, where they will install Windows Server 2016 and apply practical hands-on skills in LAN (Local Area Network) installation, administration, file permissions, firewalls, DNS and Network Printing services.

#### Computer Mathematics (MTH122) (4 credits)

This course presents mathematics needed in computer studies. Emphasis is placed on developing logical thinking skills and an algorithmic approach to problem-solving.

## Technology in Society (TNY130) (3 credits)

This course will introduce students to the impact that technological change has on society. Illustrations and examples will be drawn from the students discipline. Potential topics include the social and economic impact of new technology, responsibilities and ethics, privacy, liability and technology-based crime, and emerging trends.

It is designed to provide students from varied programs and backgrounds with a particularly relevant and timely appreciation of the impact technology and technological advances have made on every aspect of society. Technology and its implementation in society have strengths, weaknesses, opportunities and threats. This course investigates the social, legal, and ethical issues the use of technology raises.

#### Semester 2

#### Business Applications I (CSA103) (4 credits)

In this course students will learn the basic to intermediate features of Microsoft Excel and Access. Students will learn to develop spreadsheet applications involving formulas and statistical charting as well as learn database concepts in order to develop small functional database systems. Students will be introduced to database design, table structures, forms, queries and reports. In addition, students will be introduced to the basic SQL structure and data mining to generate queries from standard database applications.

Programming Using C++ (CSD102) (5 credits)

The primary focus of this programming course is to develop the student's logical problem-solving skills. At the same time, the student will learn the constructs inherent in all programming languages. To understand the program development process, the following concepts will be discussed: structured programming techniques, pseudocode, algorithm development, syntax, data types/variables, debugging, documentation, conditions, looping, user-defined functions, arrays, pointers, structures, file handling and an introduction to OOP using classes. Problem-solving skills are developed through programming assignments of increasing complexity.

#### Web Scripting Languages (CSD212) (4 credits)

Students will be writing comprehensive Client-Side web based applications using JavaScript technology. Students will learn JavaScript code that will be cross-browser compatible. The course content will focus on; using JavaScript with well-formed Web pages; work with JavaScript variables and data types and learn how to use the operations that can perform them; add functions, events, and control structures; use the browser object model; ensuring data that is entered into Web forms is correct before sending to the server; use object oriented programming techniques; manipulate data in strings and arrays.

#### Introduction to LINUX (CSO102) (4 credits)

This course introduces the student to the Linux Operating system with particular emphasis on command line tools, utilities and shell scripting. The student will learn and apply the various commands and utilities related to file system management, process management, program development and data processing. In addition the student will learn about shell concepts and become proficient in the use of shell features such as command line editing and learn and apply Unix concepts such as pipes and filters. The student will apply the aforementioned utilities and concepts in the writing of shell scripts.

#### PC Hardware and Networking (CST104) (4 credits)

This course provides an overview of computer hardware and networking. The hardware components of a typical computer system will be studied as well as the system levelsoftware such as the operating system and device drivers. The basics of networking will be studied and the student will build a network both wired and wireless and share resources across it. Experiments with network communication encryption will be performed. Topics in mobile and cloud computing will also be covered.

#### Semester 3

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Systems Analysis and Design (CSD202) (5 credits)

In this course we will follow a structured, methodical approach to systems analysis and design. The student will gain a thorough understanding of the System Development Life Cycle (SDLC) through the preparation of deliverables (documents, discussions, coding) at each stage. We will also compare and contrast some of the newer development methodologies such as the modified SDLC, Rapid Application Design (RAD), Object Oriented Analysis and Design (OOA&D), and others.

The most important component of system development will always be communication. Therefore, communication is the key to success in software development and thus oral, written and interpersonal communication skills will be the main focus of this course. Students will work individually, and within a team environment, to develop their analytic/system design skills and prepare a complete system proposal.

#### Mobile Applications I (CSD203) (4 credits)

This course provides an introduction to mobile application development using Appinventor 2.? Appinventor is a visual design tool that uses blocks to specify application behavior and provides a new way to program applications.? The student will apply design concepts and use the Appinventor visual design environment? to write applications for Android mobile devices.

## Introduction to C#, .NET and Desktop Applications (CSD207) (4 credits)

This course introduces the student to the C# programming language and the .NET framework. Students will design, develop, test and debug applications demonstrating practical knowledge of C# language constructs and the .NET framework and libraries. Desktop applications including Windows Forms and console based applications will be written in the Visual Studio Integrated Development environment.

?

Students will write applications that build on concepts and language constructs developed in this and other courses including structured programming techniques, basic language syntax, data types, file I/O, variable scope, arrays, collection classes, references, sequence, selection, repetition and object oriented programming techniques such as encapsulation, inheritance, polymorphism and UML syntax.

?

This is a lab oriented course with emphasis on practical hands on exercises. ?Students will be introduced to and gain practical knowledge in the use of git, git clients and cloud based repositories.

## Database Modelling (CSD210) (4 credits)

This course will emphasize the importance of database design prior to implementation. The student will learn to capture and model the user's data environment through the analysis and design of relational databases using the Entity-Relationship Model and normalization techniques. Database models will be physically implemented using a relational DBMS and SQL (Structured Query Language). To understand the database development process, the following concepts will be discussed: conceptual model, logical model, entities, attributes, relationships, cardinalities, primary and foreign keys, normalization, and data integrity.

## JAVA I (CSD211) (4 credits)

This course provides an introduction to software engineering using the Java programming language. The student will apply knowledge of program structure and programming constructs such as selection, looping and data structures, to the writing of programs.

In addition the concepts of objects and classes, inheritance and polymorphism will be introduced and applied in the writing of programs. The course continues with an introduction to GUI programming with an emphasis on event driven programming and concludes with exception handling and binary I/O.

Programs will be written using the Netbeans IDE in the Windows Operating System environment.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a

socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 4

## Business Communication (CMM215) (3 credits)

This course provides employment-related theory and practice in those written and oral reporting skills typical of a modern business or institution. The principles of writing are taught through the writing process.

## Database Programming using SQL (CSD220) (4 credits)

This course is a continuation of Database Design and Implementation I, where more advanced design and implementation of systems will be completed. A major focus of the course is on the physical implementation and manipulation of databases. More advanced SQL (Structured Query Language) will be used for processing and managing relational databases. The DBMS platform that will be used is MySQL. Database design/modelling will be revisited to ensure the student has grasped the major concepts taught in the previous course. The course will also extend the concepts of database management to include such topics as managing multi-user databases and data warehouse design.

#### JAVA II (CSD221) (4 credits)

This course introduces students to the concepts of Object-Oriented Programming and applies them in practical problem-solving exercises. The course presently uses the Java programming language and the Netbeans IDE as the development environment. This course builds on the skills developed in previous courses, in Java, C++ and Python.

## Advanced Web Applications (CSD223) (4 credits)

The Advanced Web Applications courses uses the content taught in previous courses that delivered the XHTML, as well as the introduction to JavaScript course as a foundation to the every expanding web application technology that fuels everything from personal computing, to corporate applications required to meet the world business needs. This course will focus on two popular areas of web application development: Advanced JavaScript, and JQuery. Students will be collaborating in small groups, as well as polish their presentation skills.

#### Advanced C# and .Net, Web Applications (CSD331) (5 credits)

This is the second course in C# and introduces Web Application development using the C# and .NET development environment. ?In addition to building on concepts introduced in the first course, this course will develop skills in the use of various technologies including, databases (ADO.Net), Web development using ASP.Net, Web forms, MVC (Model-View-Controller ), Web application deployment, LINQ and other technologies. ?Develop and publish Web apps to Azure (cloud based services). Use Azure services such MSSQL and MySQL databases to create cloud based database Web Applications.

Advanced Object oriented programming techniques will be discussed in this course and build on the concepts developed in another concurrently delivered OOP course.

Students will develop Web applications using the Visual Studio IDE supporting Create, Read, Update and Delete (CRUD) operations on a database. ?This is a lab oriented course with heavy emphasis on databases

and Web client and server technologies.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Computer Programmer Analyst

**Ontario College Advanced Diploma (3 Years - 6 Semesters ) (2091)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Computer Programmer Analyst advanced diploma program (2091) is designed for those students who have completed and shown above-average competencies in the Computer Programmer diploma program (2090) and who wish to continue to develop programming analysis skills. The Computer Programmer is four semesters and the Computer Programmer Analyst program provides an additional two semesters or third year of study.

Skills developed in the four-semester Computer Programmer (2090) program will be expanded upon with a third year of study in the Computer Programmer Analyst program (2091). The Computer Programmer Analyst program places an emphasis on developing analytical skills and working on team-based projects. The first semester (of the third year of study) is classroom based where students will learn and apply various technologies including JavaScript, Object Oriented Analysis and Design, PHP, server side java, mobile application development and databases in an application driven team environment. The final semester consists of a 4-month work experience. Students spend approximately 400 hours on-site at a local business or agency within a programming team, gaining valuable practical experience.

Students may have the opportunity to be involved in applied research projects. Please see the -`Applied Research Centre`- section for more information.

#### **PROGRAM OUTCOMES**

## A graduate of the Computer Programmer Analyst Program at Sault College will reliably demonstrate the ability to:

- 1. troubleshoot and document problems associated with software installation and customization.
- 2. analyze and define the specifications of a system based on requirements.
- 3. design, test, document, and deploy programs based on specifications.
- 4. apply knowledge of the design, modeling, implementation, and maintenance of a database.
- 5. apply knowledge of networking concepts to develop, deploy, and maintain programs.
- 6. propose and justify the design and development of an integrated solution based on an analysis of the business environment.
- 7. use relevant methodologies, policies, and standards to develop integrated solutions.
- 8. apply knowledge of security issues in the analysis, design, and implementation of integrated solutions.
- 9. develop and maintain effective working relationships with clients.
- 10. articulate, defend, and conform to workplace expectations found in information technology (IT) environments.
- 11. contribute to the successful completion of the project applying the project management principles in use.

Reference

Ministry of Training, Colleges and Universities Computer Programmer Analyst Program Standards (MTCU 60503), February 2006.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Completion of the 2-year Computer Programmer Program.

## **CAREER PATHS**

A strong demand for programmer/analyst graduates exists in a number of different businesses and industries both locally and nationally. Graduates may seek employment in a wide range of positions such as: software development, systems analysis and design, user interface design and human factors, web and database design and programming, project management, system and database administration, end user support, management of technology. Potential for career advancement and portability of skills is high.

## **OTHER INFORMATION**

#### This program will not be offered in the 2020 / 2021 Academic Calendar Year.

Please Note: Semesters 1 to 4 are taken in the 2-year Computer Programmer program. Upon successful completion of the Computer Programmer program, students will have the option to enter semester 5 of the Computer Programmer Analyst program. (subject to enrolment)

For more information contact Program Coordinator Bazlur Rasheed at 705.759.2554 ext?2668 or email bazlur.rasheed@saultcollege.ca

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CSD105-3 Python CSD120-5 Introduction to Web Development CSO104-5 Introduction to Operating Systems and LAN MTH122-4 Computer Mathematics TNY130-3 Technology in Society

#### **SEMESTER 2**

CSA103-4 Business Applications I CSD102-5 Programming Using C++ CSD212-4 Web Scripting Languages CSO102-4 Introduction to LINUX CST104-4 PC Hardware and Networking

#### **SEMESTER 3**

CMM115-3 Communications I CSD202-5 Systems Analysis and Design CSD203-4 Mobile Applications I CSD207-4 Introduction to C#, .NET and Desktop Applications CSD210-4 Database Modelling CSD211-4 JAVA I GEN100-3 Global Citizenship

#### **SEMESTER 4**

CMM215-3 Business Communication CSD220-4 Database Programming using SQL CSD221-4 JAVA II CSD223-4 Advanced Web Applications CSD331-5 Advanced C# and .Net, Web Applications

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 5**

CAR300-5 Applied Research Project CSD309-4 Mobile Applications II CSD318-4 Project Management CSD320-5 Web DBMS CSD322-4 Java III

SEMESTER 6 CSE340-15 Work Placement

## **Course Descriptions**

#### Semester 1

#### Python (CSD105) (3 credits)

The Python programming language, is an easy-to-learn and increasingly popular object-oriented language, that allows students to become comfortable with the fundamentals of programming without the troublesome syntax that can be challenging for novices. With the knowledge acquired using Python, students gain confidence in their skills and learn to recognize the logic behind developing high-quality programs. The course focuses on the use of variables, program structure, control structures, functions and lists.?

The main objective of the course is to set the foundation for other programming languages throughout the duration of the program.? The focus is not to make you an expert Python programmer, but rather have you recognize the main programming constructs that you will encounter in all programming languages.

#### Introduction to Web Development (CSD120) (5 credits)

A student in this course will learn the basics of the World Wide Web and creating Web Pages. The fundamentals of Web Page creation will be covered including how to: create anchors, attach relative and absolute hyperlinks, linking to other types of documents (such as Word, Excel, Powerpoint, PDF), work with fonts, colours, and graphics as well as a variety of tools to enhance web pages. The web development will be enhanced by the use of: tables, newspaper style layouts, Cascading Style Sheets, dynamic HTML, and forms. If time permits, we will explore JavaScripting and using other enhancing features such as sound, video, Java Applets, and animated features.

Introduction to Operating Systems and LAN (CSO104) (5 credits)

This course will introduce students to Client, Server and Virtual Operating systems.

Students will become familiar with Sault College's computing infrastructure regarding security and terms-of-use policies, login/logout procedures, disk storage access and quota, domain access, internet and email usage. Using a virtual Operating System, each student will then proceed to install their own Microsoft Windows 10 that will be configured to interact in a domain environment. Upon completion of Windows 10, students will be introduced to Network Operating Systems, where they will install Windows Server 2016 and apply practical hands-on skills in LAN (Local Area Network) installation, administration, file permissions, firewalls, DNS and Network Printing services.

## Computer Mathematics (MTH122) (4 credits)

This course presents mathematics needed in computer studies. Emphasis is placed on developing logical thinking skills and an algorithmic approach to problem-solving.

#### Technology in Society (TNY130) (3 credits)

This course will introduce students to the impact that technological change has on society. Illustrations and examples will be drawn from the students discipline. Potential topics include the social and economic impact of new technology, responsibilities and ethics, privacy, liability and technology-based crime, and emerging trends.

It is designed to provide students from varied programs and backgrounds with a particularly relevant and timely appreciation of the impact technology and technological advances have made on every aspect of society. Technology and its implementation in society have strengths, weaknesses, opportunities and threats. This course investigates the social, legal, and ethical issues the use of technology raises.

#### Semester 2

## Business Applications I (CSA103) (4 credits)

In this course students will learn the basic to intermediate features of Microsoft Excel and Access. Students will learn to develop spreadsheet applications involving formulas and statistical charting as well as learn database concepts in order to develop small functional database systems. Students will be introduced to database design, table structures, forms, queries and reports. In addition, students will be introduced to the basic SQL structure and data mining to generate queries from standard database applications.

## Programming Using C++ (CSD102) (5 credits)

The primary focus of this programming course is to develop the student's logical problem-solving skills. At the same time, the student will learn the constructs inherent in all programming languages. To understand the program development process, the following concepts will be discussed: structured programming techniques, pseudocode, algorithm development, syntax, data types/variables, debugging, documentation, conditions, looping, user-defined functions, arrays, pointers, structures, file handling and an introduction to OOP using classes. Problem-solving skills are developed through programming assignments of increasing complexity.

## Web Scripting Languages (CSD212) (4 credits)

Students will be writing comprehensive Client-Side web based applications using JavaScript

technology. Students will learn JavaScript code that will be cross-browser compatible. The course content will focus on; using JavaScript with well-formed Web pages; work with JavaScript variables and data types and learn how to use the operations that can perform them; add functions, events, and control structures; use the browser object model; ensuring data that is entered into Web forms is correct before sending to the server; use object oriented programming techniques; manipulate data in strings and arrays.

## Introduction to LINUX (CSO102) (4 credits)

This course introduces the student to the Linux Operating system with particular emphasis on command line tools, utilities and shell scripting. The student will learn and apply the various commands and utilities related to file system management, process management, program development and data processing. In addition the student will learn about shell concepts and become proficient in the use of shell features such as command line editing and learn and apply Unix concepts such as pipes and filters. The student will apply the aforementioned utilities and concepts in the writing of shell scripts.

#### PC Hardware and Networking (CST104) (4 credits)

This course provides an overview of computer hardware and networking. The hardware components of a typical computer system will be studied as well as the system levelsoftware such as the operating system and device drivers. The basics of networking will be studied and the student will build a network both wired and wireless and share resources across it. Experiments with network communication encryption will be performed. Topics in mobile and cloud computing will also be covered.

#### Semester 3

## Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Systems Analysis and Design (CSD202) (5 credits)

In this course we will follow a structured, methodical approach to systems analysis and design. The student will gain a thorough understanding of the System Development Life Cycle (SDLC) through the preparation of deliverables (documents, discussions, coding) at each stage. We will also compare and contrast some of the newer development methodologies such as the modified SDLC, Rapid Application Design (RAD), Object Oriented Analysis and Design (OOA&D), and others.

The most important component of system development will always be communication. Therefore, communication is the key to success in software development and thus oral, written and interpersonal communication skills will be the main focus of this course. Students will work individually, and within a team environment, to develop their analytic/system design skills and prepare a complete system proposal.

#### Mobile Applications I (CSD203) (4 credits)

This course provides an introduction to mobile application development using Appinventor 2.? Appinventor is a visual design tool that uses blocks to specify application behavior and provides a new way to program applications.? The student will apply design concepts and use the Appinventor visual design environment? to write applications for Android mobile devices.

#### Introduction to C#, .NET and Desktop Applications (CSD207) (4 credits)

This course introduces the student to the C# programming language and the .NET framework. Students will design, develop, test and debug applications demonstrating practical knowledge of C# language constructs and the .NET framework and libraries. Desktop applications including Windows Forms and console based applications will be written in the Visual Studio Integrated Development environment.

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Students will write applications that build on concepts and language constructs developed in this and other courses including structured programming techniques, basic language syntax, data types, file I/O, variable scope, arrays, collection classes, references, sequence, selection, repetition and object oriented programming techniques such as encapsulation, inheritance, polymorphism and UML syntax.

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This is a lab oriented course with emphasis on practical hands on exercises. ?Students will be introduced to and gain practical knowledge in the use of git, git clients and cloud based repositories.

#### Database Modelling (CSD210) (4 credits)

This course will emphasize the importance of database design prior to implementation. The student will learn to capture and model the user's data environment through the analysis and design of relational databases using the Entity-Relationship Model and normalization techniques. Database models will be physically implemented using a relational DBMS and SQL (Structured Query Language). To understand the database development process, the following concepts will be discussed: conceptual model, logical model, entities, attributes, relationships, cardinalities, primary and foreign keys, normalization, and data integrity.

#### JAVA I (CSD211) (4 credits)

This course provides an introduction to software engineering using the Java programming language. The student will apply knowledge of program structure and programming constructs such as selection, looping and data structures, to the writing of programs.

In addition the concepts of objects and classes, inheritance and polymorphism will be introduced and applied in the writing of programs. The course continues with an introduction to GUI programming with an emphasis on event driven programming and concludes with exception handling and binary I/O.

Programs will be written using the Netbeans IDE in the Windows Operating System environment.

#### **Global Citizenship** (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 4

#### Business Communication (CMM215) (3 credits)

This course provides employment-related theory and practice in those written and oral reporting skills typical of a modern business or institution. The principles of writing are taught through the writing process.

## Database Programming using SQL (CSD220) (4 credits)

This course is a continuation of Database Design and Implementation I, where more advanced design and implementation of systems will be completed. A major focus of the course is on the physical implementation and manipulation of databases. More advanced SQL (Structured Query Language) will be used for processing and managing relational databases. The DBMS platform that will be used is MySQL. Database design/modelling will be revisited to ensure the student has grasped the major concepts taught in the previous course. The course will also extend the concepts of database management to include such topics as managing multi-user databases and data warehouse design.

## JAVA II (CSD221) (4 credits)

This course introduces students to the concepts of Object-Oriented Programming and applies them in practical problem-solving exercises. The course presently uses the Java programming language and the Netbeans IDE as the development environment. This course builds on the skills developed in previous courses, in Java, C++ and Python.

#### Advanced Web Applications (CSD223) (4 credits)

The Advanced Web Applications courses uses the content taught in previous courses that delivered the XHTML, as well as the introduction to JavaScript course as a foundation to the every expanding web application technology that fuels everything from personal computing, to corporate applications required to meet the world business needs. This course will focus on two popular areas of web application development: Advanced JavaScript, and JQuery. Students will be collaborating in small groups, as well as polish their presentation skills.

#### Advanced C# and .Net, Web Applications (CSD331) (5 credits)

This is the second course in C# and introduces Web Application development using the C# and .NET development environment. ?In addition to building on concepts introduced in the first course, this course will develop skills in the use of various technologies including, databases (ADO.Net), Web development using ASP.Net, Web forms, MVC (Model-View-Controller ), Web application deployment, LINQ and other technologies. ?Develop and publish Web apps to Azure (cloud based services). Use Azure services such MSSQL and MySQL databases to create cloud based database Web Applications.

Advanced Object oriented programming techniques will be discussed in this course and build on the concepts developed in another concurrently delivered OOP course.

Students will develop Web applications using the Visual Studio IDE supporting Create, Read, Update and Delete (CRUD) operations on a database. ?This is a lab oriented course with heavy emphasis on databases and Web client and server technologies.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 5

## Applied Research Project (CAR300) (5 credits)

This course is linked to the colleges Applied Research Centre that brings together Sault Colleges faculty, staff and students and local and regional enterprises to participate in applied research

projects that provide real-world solutions to real-world problems, enabling them to create or improve products and services and compete in the global marketplace.

Applied research deals with solving real-world problems that usually have direct commercial application. In applied research, activities such as prototype development, feasibility studies, clinical trials, technical consultation and problem solving are often involved.

Working on Applied Research Projects will lead the students to help; solve technical problems, adapt new technologies for the marketplace, develop prototypes and new or improved products and processes, enhance products, processes, and / or services, test/evaluate and perform proof of concept study, undergo incremental and larger-scale innovation.

All learning styles will be addressed by having the students learn by using manuals; instructor feedback, industry partner representatives to guide the project; small group work; as well as online research.

## Mobile Applications II (CSD309) (4 credits)

This course explores software development for wireless devices. Students will become familiar with the processes involved in creating, testing, debugging and deploying applications that will run on Android based mobile phones and tablets. Software development will occur using java in the Eclipse IDE. Applications will be written that explore the building of user interfaces, deal with persistence of data, send emails, implement a simple game and interact generally with the device. The written applications will be deployed to mobile device emulators and to various hardware devices, logistics permitting.

#### Project Management (CSD318) (4 credits)

This course provides a comprehensive overview of Project Management from an Information Technology perspective. The student will study and apply project management techniques from the various Project Management knowledge areas including project integration, scope, time, cost, quality, human resource, communications, risk and procurement management. The student will acquire practical skills in using various tools used in Project Management by applying knowledge learned in case studies and in the aforementioned areas.

#### Web DBMS (CSD320) (5 credits)

This course will broaden the students knowledge of database implementations. The focus will be to use their previous database skills and experiences and apply them to database driven web sites. A combination of technologies will be examined and used throughout the course to expose students to the alternatives that exist in web-based database applications.

The course covers the concepts and practical aspects of creating a web site and web database processing. It will also reacquaint students with relational database concepts, SQL, HTML and more importantly how they relate to creating a database driven web site. Students will be expected to create and manage a web server (Apache).

They will be required to code and work with the scripting language, PHP(the PHP Hypertext Preprocessor), in the creation of server-side scripts.

The ultimate goal of the course is the creation and implementation of a soundly designed database that is integrated in a realistic and well-designed web site. The students will be expected to work together as team members in developing a fully integrated website.

#### Java III (CSD322) (4 credits)

This course continues application development in Java with an emphasis in web application development. Various technologies and application frameworks will be introduced. Students will write applications using the JSF2 framework. Students will develop the ability to write form based CRUD (Create, Read, Update and Delete) applications, persisting data to a database backend using each of the aforementioned technologies. Applications will be written using the Netbeans IDE and the MySql database.

#### Semester 6

#### Work Placement (CSE340) (15 credits)

This course consists of on-the-job work experience designed for all third year Computer Studies students who have met the program requirements. The focus of the work experience is to provide students with hands-on computer experience in a company, or government agency that performs job functions relevant to the students course of study.

The placement gives the student the opportunity to apply their academic backgrounds and abilities, as well as broaden their knowledge base through additional job duties performed at their placements in a practical computing environment. The students perform their duties in a well supervised atmosphere, adhering to the companys policies and procedures, and hours of operation.

The computer work placements are unpaid, however, many students go on to secure a full time position or contract position with their work placement employers. Others obtain valuable letters of reference, and are able to add their new experiences gained from work placement to their resumes. The course becomes a stepping stone for the student, taking them from the academic computer curriculum, to preparing them for the real world computer job market.

# Cybersecurity - Canadian Context

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

Please note that the Cybersecurity - Canadian Context program is currently only available for delivery at our Toronto Campus.

The Cybersecurity program is designed for the individual seeking knowledge and certification in computer and network-related administration and security.

The Cybersecurity program gives students the knowledge and practical skills needed to become an industry-ready IT security professional.

In addition to communication and support training, students receive training on popular operating systems including Microsoft Windows, Microsoft Windows Server, and Linux. Moreover, students learn how to configure computer and network technologies such as Cisco routers and switches, server virtualization, network services, and security technologies, as well as learn how to perform penetration tests, vulnerability assessments and forensic analysis of security breaches. Additionally, students learn how to communicate effectively, as well as manage time and IT-related projects within a Canadian corporate infrastructure.

#### **PROGRAM OUTCOMES**

1. Develop and implement cyber security solutions to protect network systems and data.

2. Plan and implement security assessment methodologies, vulnerability management strategies and incident response procedures to generate and communicate security analysis reports and recommendations to the proper level of the organization.

3. Recommend processes and procedures for maintenance and deployment of cyber security solutions

4. Select and deploy optimal security appliances and technologies to safeguard an organization's network.

5. Comply with existing industry policies, regulations, and ethics for information systems and information technology security solutions to ensure industry expectations and standards are met or exceeded.

6. Analyze security risks to organizations and business processes to mitigate risk in compliance with industry standards.

7. Plan and conduct disaster recovery, forensic investigations and incident responses to support Business Continuity of an organization.

8. Implement and conduct penetration testing to identify and exploit an organization's network system vulnerability.

9. Perform various types of cyber analysis to detect actual security incidents and suggest solutions.

10. Maintain ongoing personal and professional development to improve work performance in the field of information technology.

11. Communicate effectively and professionally in an information technology workplace to increase overall productivity and support a positive work environment.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, Degree, or equivalent.

It is preferred that students have an educational background in an area of Information Technology: computer engineering, software, hardware, networking or a related discipline.

Applicants, whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
N/A	N/A	\$25,118.60	\$1,157.50

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM510-2 Professional Communication CYB101-4 Computer and Networking Fundamentals CYB102-4 Windows Administration anad PowerShell Scripting CYB103-6 Windows Server and Active Directory Administration CYB104-4 Project Management

#### **SEMESTER 2**

CYB201-4 Network+ CYB202-6 Linux Administration CYB203-4 IT Security: Ethical and Legal Issues CYB204-6 Cisco Technologies (CCNA)

#### **SEMESTER 3**

CYB301-5 Security Defense and Response CYB302-5 Ethical Hacking CYB303-4 Python Programming CYB304-4 IT Security Forensics CYB305-2 Career Planning and Preparation

#### **SEMESTER 4**

CYB401-20 Cybersecurity Internship

## **Course Descriptions**

#### Semester 1

#### Professional Communication (CMM510) (2 credits)

This course helps students develop professional communication skills required for success in the Hospitality and Tourism industry. Assignments involve various modes of communication, including writing, with a focus on program-related materials and expectations. With opportunities to use computers and other media, students create effective job search documents, develop interview skills, and identify career pathway possibilities. Emphasis is placed on integrating positive and inclusive language, listening to client needs, and developing error-free, effective communications.

#### Computer and Networking Fundamentals (CYB101) (4 credits)

This course reviews the essential operating system skills and understanding required for a Cybersecurity professional. More specifically, students learn how to use, configure, upgrade, troubleshoot and maintain computer hardware alongside the Windows family of operating systems, as well as basic configuration of Linux, macOS, and mobile operating systems. At course completion, students will have covered the topics covered on the CompTIA A+ Certification exam.

#### Windows Administration anad PowerShell Scripting (CYB102) (4 credits)

This course covers the skills and knowledge necessary to install, configure, administer, and support Microsoft Windows. In addition, you will learn about the various tools for administering, configuring, and troubleshooting Windows, as well as how to deploy and upgrade to the latest version of Windows, configure disks, users, drivers, printers, network interfaces and security. This course also provides students with the knowledge and skills necessary to write and maintain PowerShell scripts for automating system administration tasks.

#### Windows Server and Active Directory Administration (CYB103) (6 credits)

This course focuses on the configuration of Windows Server within an enterprise environment. More specifically, students will learn how to deploy, configure, manage and secure Windows Server and Windows Server networks, as well as configure network services and remote access. Additionally, this course covers the configuration and management of Active Directory and Group Policy, as well as Active Directory Certificate Services.

## Project Management (CYB104) (4 credits)

Communication as well as time and project management skills are vital for success in today's Canadian IT industry. Through the use of examples, demonstrations, projects and group activities, students will examine various communication, time and project management strategies and techniques that are commonly used within the context of Cybersecurity projects in the Canadian IT industry.

#### Semester 2

## Network+ (CYB201) (4 credits)

In this course students will learn the theory and concepts required to successfully administer and troubleshoot wired and wireless TCP/IP-based networks. Through this course, students will be introduced to topics included on the CompTIA Network+ certification exams.

#### Linux Administration (CYB202) (6 credits)

When properly configured, Linux can serve as one of the most stable, secure, and performance oriented operating systems available. It serves as a key component in enterprise virtualization and cloud service offerings and is used extensively in the computer forensics and cybersecurity space. In this course, students will learn how to install, configure, and administer a Linux system. More specifically, they will gain a solid working knowledge of system and network administration, cloud technologies, security tools, and more. At course completion, students will have covered most topics included on the CompTIA Linux+

#### certification exam.

#### IT Security: Ethical and Legal Issues (CYB203) (4 credits)

In the course, students will learn about the legal and regulatory environment in Canada as it relates to IT security. The course will touch on regulations in multiple provinces but will focus primary on the regulations in the province of Ontario. Ethical considerations will be viewed through a Canadian bias, as topics such as privacy, consent to use information and ethical hacking are discussed.

## Cisco Technologies (CCNA) (CYB204) (6 credits)

In this course, students learn key LAN, WAN and WLAN concepts, as well as their configuration using Cisco routers and switches. Moreover, students learn how to manage IP configuration, mitigate security threats, and automate the configuration of networks. Through this course, students will be introduced to topics included on the Cisco Certified Network Associate (CCNA) certification exam.

#### Semester 3

#### Security Defense and Response (CYB301) (5 credits)

This course covers IT security defense and response in the Canadian and Ontario regulatory environments. This course covers the procedures used to implement and configure security within an enterprise environment, as well as respond to security incidents. Focus will be placed on tools that can be used to secure access to data and mitigate security breaches.

#### Ethical Hacking (CYB302) (5 credits)

Viewed from a Canadian perspective, this course introduces students to what and who ethical hackers are, and how they are different from non-ethical hackers. The course explores why ethical hacking is essential for protecting data from cyber-attacks. This course covers the procedures used to assess the attack surface of an organization, as well as perform a penetration test and vulnerability assessment.

#### Python Programming (CYB303) (4 credits)

Python is one of the most sought-after programming languages for cybersecurity. Students will learn the datatypes, structures, syntax and constructs of the Python programming language. Students will be equipped with programming skills that can assist in identifying security vulnerabilities and discovering how to fix them.

## IT Security Forensics (CYB304) (4 credits)

In this course, students will learn about computer forensics and methods of investigating security breaches. Students are introduced to digital forensic tools in order to acquire, preserve, and manage digital evidence to support investigations. They will also learn to analyze cyber intrusion, reconstruct vital data, examine organizational policy violations and resolve disputes.

#### Career Planning and Preparation (CYB305) (2 credits)

This module introduces tools for planning and preparing for a successful job search in Canada. Students will learn about the Hidden Job Market and ways to access it in their upcoming job search, how to research opportunities and network for industry contacts and use appropriate etiquette when communicating with prospective employers. Students will identify their personal skills, values and preferences for the workplace, prepare a professional resume and references, and organize proof documents for their career portfolio. Students will learn how to conduct an effective job search and identify various methods of applying for work with today's technology.

#### Semester 4

## Cybersecurity Internship (CYB401) (20 credits)

On successful completion of the first three semesters of this program, students will be placed on field placement at an outside organization. Students will have the opportunity to apply their newly developed knowledge and skills in a real-world environment.

## Geographic Information Systems -Applications Specialist

Section B.116 6/2/2020

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (4018)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

By bringing your own expertise to the program, you will hone your skills and fast track your way through placements in health sciences, municipalities and natural resources fields.

This post-graduate certificate program prepares you for a career in geomatics, the integration of geographic information systems (GIS) and remote sensing. GIS is the computerized analysis of spatially-oriented data and the resulting production of usable products such as maps, tables and layouts.

Our highly interactive, hands-on training approach in our new 3D state-of-the-art computer lab uses the latest software from top GIS and remote sensing vendors. Specific courses provide you, the student, with practical experience in the use of ArcGIS, PCI Geomatica, AutoCAD, MS Access, MS Project and other standard Microsoft products, as well as Visual Basic, Python, and ArcObjects programming languages.

You will learn the fundamentals and theory of GIS with a focus on hands-on training, and you will also investigate the influence of natural phenomena in the interpretation of remotely sensed data. Applications in municipal services, natural resources, business and health are considered. The integration of fieldwork using GPS units into the GIS environment is included. As a student who is sponsored by an employer, you will have an opportunity to work on specific and real world projects. One of the many highlights is that you will participate in a four-week field placement with a potential employer in a location and aspect of GIS that meets the employer's needs.

Students may have the opportunity to be involved in applied research projects. Please see the Applied Research Centre section for more information relating to the Sault College Applied Research Centre.

#### **PROGRAM OUTCOMES**

#### A graduate of the GIS Program at Sault College will reliably demonstrate the ability to:

- 1. understand the general concepts of spatial information and the current methodologies used to input, store, manipulate, and retrieve this type of data in a computer based environment;
- 2. understand the typical data structures, algorithms, and computational problems that are encountered in various GIS technologies;
- 3. be aware of the variety of sources of spatial data, such as surveying and remote sensing, that feed into a GIS, and the methods by which these data are realized in a GIS system;
- 4. understand the ways in which GIS technologies can be applied within specific disciplines (see assumption above), and the advantages, changes in method, developmental problems, and restructuring that may result from the adoption of these technologies;
- 5. be capable of designing and executing, in a progressive manner, algorithms and programs to handle spatial data and associated hardware devices in a programmatic environment of a GIS;
- 6. be aware of the issues surrounding the communication of data extracted from a GIS to a variety of potential end users;
- 7. be capable of generating a plan for the design, implementation, and operation of a proposed GIS

systems for a typical industrial client or group, and executing this plan as a demonstration project.

Reference

Ministry of Training, Colleges and Universities Geographic Information System s Program Description (MTCU 70303)

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Advanced Diploma, University Degree or equivalent in the fields of geography, engineering, health sciences, natural resources, or computers, although other fields will be considered on an individual basis. Graduates with an Ontario College Diploma may be considered on an individual basis dependent on appropriate background and competencies in GIS and computers.

## **CAREER PATHS**

The worldwide demand for more efficient ways to gather and interpret spatial data on resources and other features of the earth's surface is constantly increasing. This high-tech, leading-edge program provides the graduate with the skills to become an integral part of an industry that is resulting in a variety of disciplines.

New applications of GIS technology in natural resources, municipal planning and operations, business, health sciences, agriculture and many other fields provide graduates access to job opportunities presently available to few.

Job titles of graduates will include GIS Technician, GIS Specialist, GIS Analyst, GIS Applications Specialist, Geomatic Specialist, GIS Programmer, and GIS/Internet developer.

## **OTHER INFORMATION**

This program will not be offered in the 2020 / 2021 Academic Calendar Year.

For more information contact Program Coordinator Heath Bishop at 705.759.2554 ext 2616 or email <u>heath.bishop@saultcollege.ca</u>

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

CSD105-3 Python GIS403-3 Introduction to ACCESS GIS406-4 Research Project/Presentation I GIS422-5 Introduction to Remote Sensing GIS426-5 Introduction to ArcGIS GIS429-2 CAD and GIS

#### **SEMESTER 2**

GIS411-5 Research Project/Presentation II GIS416-4 Web GIS GIS424-2 Independent GIS Project GIS427-5 GIS Applications GIS428-2 Advanced Programming for GIS GIS431-3 Advanced Remote Sensing GIS440-10 Field Placement

## **Course Descriptions**

#### Semester 1

Python (CSD105) (3 credits)

The Python programming language, is an easy-to-learn and increasingly popular object-oriented language, that allows students to become comfortable with the fundamentals of programming without the troublesome syntax that can be challenging for novices. With the knowledge acquired using Python, students gain confidence in their skills and learn to recognize the logic behind developing high-quality programs. The course focuses on the use of variables, program structure, control structures, functions and lists.?

The main objective of the course is to set the foundation for other programming languages throughout the duration of the program.? The focus is not to make you an expert Python programmer, but rather have you recognize the main programming constructs that you will encounter in all programming languages.

#### Introduction to ACCESS (GIS403) (3 credits)

In this course students will learn to use the basic to intermediate features of Microsoft Access. Students will learn to use functions, menus and toolbars, and create, enter and edit database records. Students will also be introduced to basic SQL commands using an access database.

This course will also provide an introduction to database design. Through practical applications students will learn to design tables, queries, reports in addition to understanding and creating relationships bet ween numerous tables.

Practical hands-on applications will be utilized to incorporate basic database concepts. A sound underst anding of this material is required in order to develop and maintain an online database in the following se mester.

#### Research Project/Presentation I (GIS406) (4 credits)

This course will introduce the student to the practical use of field equipment in a GIS environment, to data manipulation and management, to presentation as a method of communication and to the design of research projects. Skills to be gained include the practical use of Global Positioning Systems, spreadsheet software, PowerPoint presentations, and designing research project proposals.

#### Introduction to Remote Sensing (GIS422) (5 credits)

The use of remotely sensed data is becoming increasingly prominent in todays society. Through accessing satellite imagery and aerial photography, the student will gain a theoretical background in remote sensing and practical abilities in the PCI Geomatica and ArcGIS software environments. Topics to be covered include: remote sensing physics, data sources, visual imagery, image enhancement and filtering, multispectral classification, data import and export, change over time analysis and GIS integration, georeferencing and mosaicking aerial photographs, orthorectification and LIDAR imagery.

#### Introduction to ArcGIS (GIS426) (5 credits)

As a foundational course in the program, this course provides much more than just an introduction to GIS theory and concepts. Through hands-on application of industry leading ArcGIS software, students will learn how the various components of the software can be used together to solve complex spatial problems. Specific attention will be paid to the following topics: the ArcGIS interface, data management and geoprocessing, presenting data, manipulating, editing and creating data, attribute and spatial queries, raster analysis and coordinate systems.

## CAD and GIS (GIS429) (2 credits)

This course investigates the integration between AutoCAD and GIS software packages. The ability to convert data between these packages is essential in many GIS industries, and is therefore a focal point of the course. The students will be using real-world data to solve geo-spatial problems while also learning the intricacies of file conversion and compatibility. Students will gain experience creating spatial data within the AutoCAD and AutoCAD Map environments, and subsequently learn the skills necessary to successfully bring the data into other GIS software packages for further analysis.

#### Semester 2

#### Research Project/Presentation II (GIS411) (5 credits)

Projects form the foundation of modern-day business and research. In this course students develop project management, oral presentation, and report writing skills by completing a GIS, remote sensing or GPS project with a sponsoring organization. Through working on these projects, students learn how to plan, develop and undertake a real-world GIS project and get a glimpse of what lies ahead when working in industry.

#### Web GIS (GIS416) (4 credits)

The course introduces students to Web GIS technologies. Students will acquire skills using Web-Based GIS tools for the creation of interactive online and mobile GIS mapping solutions.

Participants will create online GIS maps utilizing AppBuilders and HTML, CSS, and JavaScript code. The result will be the presence of interactive custom Web GIS maps for PC, tablet and mobile users.

ESRIs ArcGIS Online software will be the platform of choice when creating and sharing GIS maps, apps, and data.

A geographic Web GIS project will be assigned during the course to allow students to gain practical hands-on experience.

The course is organized around lectures, lab activities, case study analysis, testing evaluation and a course project.

#### Independent GIS Project (GIS424) (2 credits)

This course is designed to continue the development of students skills in project development/management as well as their GIS and cartographic abilities. Each student will come up with their own project idea, gather the necessary data, manipulate/edit the data, perform necessary spatial analysis and produce a final GIS report and poster/layout which clearly and aesthetically shows their project findings. ArcGIS will be the primary software used for the project, although supplemental software packages may be used as necessary. The students will hone their GIS skills, as well as perform peer-editing

#### on the final cartographic products.

#### GIS Applications (GIS427) (5 credits)

This course builds upon the students previously developed abilities in ArcGIS. The primary component of the course focuses on applying the students knowledge to everyday projects that are performed in the work world. Through undertaking these types of projects, the students gain an understanding of not only how to use the software extensions, but also how they can be applied in an everyday work setting in various fields. Course work continue to develop problem solving skills through the use of geodatabase functionality, Modelbuilder, Spatial Analyst, Network Analyst and geocoding.

#### Advanced Programming for GIS (GIS428) (2 credits)

The power of Geographic Information Systems lays in the automation of repetitive and complex GIS operations to save time, produce consistent results and present clients with usable GIS products and interfaces. Upon successful completion of this course the student will have developed useful Python programming skills which can be applied to the field of GIS and beyond.

#### Advanced Remote Sensing (GIS431) (3 credits)

The field of remote sensing is rapidly advancing and includes numerous ways in which to collect and analyze spatial information. This course builds upon the Introduction to Remote Sensing course by going beyond optical collection methods and including such data sources as LIDAR, RADAR, Thermal and SONAR data. In addition to these methods, some unique optical data sources such as Drone image inspection and others are included as well. This course complements and builds upon the Introduction to Remote Sensing course by expanding students exposure to a variety of remote sensing methods and processes.

#### Field Placement (GIS440) (10 credits)

This is a four-week full-time field placement in a GIS workplace. Students are provided with an opportunity to request location, field, and the type of work (Natural Resources, Municipal, Health, etc.) they will be doing. This placement provides an opportunity to work next to experienced GIS practitioners in government, industry, consulting firms, municipalities, utilities or in other specialized organizations with GIS departments. Itcan lead to employment opportunities either in the host organization or through contacts made during the placement.

# Health Informatics

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (2197)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

This program will provide the student a better understanding of the use of Information Technology as it relates specifically to the Healthcare Information Technology Domain. Global advancements in the use of technology in electronic medical records, automated voice transcription, digital imaging concepts, ADT (admission-discharge-transfer) systems messaging and workflow, protocol analysis with HL7 and Dicom, HIPPA/PIPEDA/Security, billing, and similar technologies.

#### **PROGRAM OUTCOMES**

A graduate of the Health Informatics program at Sault College will reliably demonstrate the ability to:

- 1. Assess organizational requirements for health information system technologies (HIST) and evaluate the impact of HIST on business/clinical processes, and on health services delivery to inform change in necessary.
- 2. Develop, implement, and evaluate health information management practices, policies and processes to support client care, organizational goals, operations, and regulatory compliance.
- 3. Analyze relevant local, national and global health care and health information management issues, trends, technologies and standards to support health information systems and processes.
- 4. Ensure compliance with the legal health obligations, as well as with the professional, ethical and organizational standards that ensure privacy, security and confidentiality in the access, retention, storage and disposal of personal health information.
- 5. Apply business and system analysis techniques to evaluate the effectiveness of health information systems technologies within a health-related setting.
- 6. Work professionally, ethically and collaboratively with stakeholders and as a member of an interdisciplinary health care team, to enhance the collection, distribution, use, security and awareness of quality health information and its impact on client care.
- 7. Design training and education for staff within the health care organization on the effective use of health information system technologies (HIST) and processes.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, Degree, or equivalent. A diploma or degree in a health-related field degree is an asset.

Applicants whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.

## **CAREER PATHS**

Graduates will be prepared for positions in health care organizations to lead or assist with health information and/or technology projects as the: clinical or IT Manager; the Health Technology Leader; Clinical Informatics Specialist; or Health Technology Education Specialist.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,025.80	\$1,117.00	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **EDUCATIONAL PATHS**

The laddering opportunities would be from Diploma, Advanced Diploma or Degree programs into the Graduate Certificate.

The list of these programs at Sault College is as follows:

- Bachelor of Science in Nursing Degree
- Practical Nursing Diploma
- Occupational Therapist Assistant & Physiotherapist Assistant Diploma
- Information Technology Diploma

## **OTHER INFORMATION**

For more information contact Program Coordinator Bazlur Rasheed at 705.759.2554 ext 2668 or email bazlur.rasheed@saultcollege.ca

## **PROGRAM OF STUDY**

#### **SEMESTER 1**

HCA111-3 Communications for Healthcare Professionals HIN101-3 Foundations of Business Analysis HIN102-3 Business Analysis Competencies and Techniques HIN103-3 Healthcare Systems HIN104-3 Healthcare Information Technology HIN105-3 Information Management and Clinical Decision Making MAP205-3 Project Management

#### SEMESTER 2

HIN201-2 Portfolio Development and Career Readiness HIN202-3 Health Data Standards HIN203-3 Health Informatics System Analysis and Evaluation HIN204-3 Health Informatics Technology and Clinical Practice HIN205-3 Health Information: Legislation, Privacy, and Security HIN206-5 Capstone Project

## **Course Descriptions**

Semester 1

### Communications for Healthcare Professionals (HCA111) (3 credits)

This course provides students with the resources and skills to communicate in an effective, professional manner in a health care setting, both internally and externally to the organization. Students will apply best practices in communication in both oral and written formats. Students are expected to use a variety of resources, technologies, and social media to interact with stakeholders

#### Foundations of Business Analysis (HIN101) (3 credits)

Learners are introduced to the discipline of business analysis. Students will study business analysis knowledge, the underlying core competencies, and learn the techniques used in the business analysis profession.

#### Business Analysis Competencies and Techniques (HIN102) (3 credits)

This course introduces students to the skills and instruments used in analysis/informatics. Learners will learn how to manage working groups in traditional face to face and online formats using typical methods of communication within an organization. By working in groups, students will learn about the development of successful teams and how to optimize different communication styles. They will develop an understanding in how to deal with colleagues and stakeholders in difficult situations through the use of critical and creative thinking. Throughout this course, students will develop techniques, tools, and documents they will be able to utilize as they progress through this program.

#### Healthcare Systems (HIN103) (3 credits)

Students will learn about the Canadian healthcare system(s) from the federal, provincial and local municipal perspectives. They will also consider the health care system within the social, political, economic, and historical contexts. This course will explore various health care providers, professional associations and practice settings. There will be a focus on the health care system within Ontario from the viewpoint of issues, policies, and healthcare reform. Students will explore a variety of health information systems with the accompanying benefits and challenges in health organizations.

# Healthcare Information Technology (HIN104) (3 credits)

This course will provide the basic foundation of health information technology (HIT) through current definitions and topics, such as: health informatics, health care data, electronic health record, acute and primary care. Students will explore the health information technology being used in a variety of settings, such as: hospitals, public health, long term care, community, and physician's offices. The course will also investigate how healthcare professionals and patients/consumers use data. Students will also be exposed to the advancements in HIT globally through health informatics; mobile technology, the use of telemedicine, and artificial intelligence (AI) applications.

#### Information Management and Clinical Decision Making (HIN105) (3 credits)

This course will not only explore the difference between information and knowledge but also their individual importance in healthcare informatics. Students will learn about the radical changes to how health information is being gathered, stored, analyzed, and reported. These changes are evolving rapidly and impacting the design of the technology and applications meant to contain health information. These advancements also impact clinical decision making and practice. Students will examine how these changes will influence their own clinical decision making and practice.

#### Project Management (MAP205) (3 credits)

This course provides a comprehensive overview of Project Management from an Information Technology perspective. The student will study and apply project management techniques from the various Project Management knowledge areas including project integration, change theory, scope, time, cost, quality, human resource, communications, risk and procurement management. The student will acquire practical skills in using various tools used in Project Management by applying knowledge learned in assigned projects.

#### Semester 2

#### Portfolio Development and Career Readiness (HIN201) (2 credits)

This course will help students analyze the current trends and career opportunities with the intention of finding employment. Various strategies for acquiring work will be explored and analyzed by the class. There will also be an opportunity to develop the necessary resumes, cover letters, interview skills, and a professional portfolio.

#### Health Data Standards (HIN202) (3 credits)

Students will learn the very important relationship between health data standards and health informatics. Learners will be expected to understand specific topics, such as: minimum data sets, nomenclature, classification systems, taxonomies, and the significance of data standards. Minimum data sets like the Discharge Abstract Database (DAD), National Ambulatory Care Reporting System (NACRS) and Canadian MIS database (CMDB), and others will be analyzed.

#### Health Informatics System Analysis and Evaluation (HIN203) (3 credits)

This course focuses on current and evolving systems used in health care settings. In a computerized lab environment, students will assess existing processes and create potential ones using different business or clinical process mapping methodologies and modeling tools. Concepts, techniques, and methodologies used in a systems development life cycle, as well as strategies of systems analysis, design and implementation will be discussed. The use of a variety of IT infrastructure management models will be studied. The role of various individuals in an organization will be analyzed in light of best practices in system development, training and implementation.

#### Health Informatics Technology and Clinical Practice (HIN204) (3 credits)

This course will increase the understanding of health informatics and health information technology provincially, nationally, and globally. This course will also study the influence of digitization on clinical practice. In the realm of clinical practice, we will study the development of electronic health records, patient portals, mobile technologies, and other clinical tools. Students will be expected to research any new or evolving technologies and their impact on clinical practice, as well.

#### Health Information: Legislation, Privacy, and Security (HIN205) (3 credits)

Students will study the importance of the legislation which governs privacy, confidentiality and security in Health Informatics. This course analyzes the issues health agencies need to attend to, in order to protect the personal health information of their patients and clients. The legislation regulating the management of health data will be studied, along with risk assessment and mitigation strategies regarding the protection of patient data.

#### Capstone Project (HIN206) (5 credits)

Students will apply business analysis models to case studies about various health systems, through the use of core competencies, business analysis knowledge and techniques. Collaborative learning methods will be used via group or team work. There will be set criteria and deliverables which will be expected to be met during course. Mentoring will be provided throughout the course to support students in meeting the necessary requirements. This course will not follow a traditional format with lectures but faculty will be available for support, to answer questions and to review specific business analysis techniques. Along with the group project, students will be individually graded on reflections and a self-assessment of their personal work and contributions. The completed work will be evaluated using Quality Assessment best practices.

# Mobile Applications Design

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (2191)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Mobile application development denotes a process by which application software is developed for mobile or wearable devices. Students of these programs learn to build native applications for mobile devices, as well as cross platform web applications for all devices, and create solutions with a variety of technologies and programming languages.

#### **PROGRAM OUTCOMES**

The graduate has reliably demonstrated the ability to:

- 1. Evaluate business and design requirements to select, formulate and implement mobile solutions.
- 2. Propose deliverable proprietary mobile solutions to prospective clients using business, marketing and sales strategies.
- 3. Develop application and user interfaces for various mobile platforms that leverage evolving mobile device capabilities.
- 4. Design and evaluate new and existing websites to ensure mobile usability for various devices and platforms.
- 5. Appraise technology criteria to create cross-platform applications built with rich-media, CSS and HTML-based technologies.
- 6. Design, develop and publish device-specific mobile applications using mobile solution technology to meet stakeholder requirements.
- 7. Evaluate and implement new features for current IOS, Android and other platforms to meet client needs.
- 8. Select and integrate database and server-side technologies into mobile solutions.
- 9. Construct and test security of mobile solutions using appropriate network technologies to secure against system threats.
- 10. Use project management principles and industry protocols to manage a collaborative mobile application development and to ensure quality assurance.
- 11. Design, develop and build a database to application specifications.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, or Degree in the field of computer systems technology, network architecture, computer engineering, information security or equivalent.

Applicants whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements.

# **CAREER PATHS**

#### **Possible Occupational Titles:**

- Mobile Applications Designer
- Mobile Applications Developer
- Mobile Applications Specialist
- Mobile Applications Security
- Mobile Applications Engineer
- Mobile Applications Consultant
- Mobile Applications Advertising Consultant
- Mobile Applications Sales Rep

#### Areas of Employment:

- Health Care
- Education
- Banking
- Finance Industry
- Transportation
- Business
- Advertising
- Marketing

# MANDATORY FEES

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,025.80	\$1,117.00	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

For more information contact Program Coordinator Bazlur Rasheed at 705.759.2554 ext 2668 or email <u>bazlur.rasheed@saultcollege.ca</u>

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

MAP101-3 Information Technology Entrepreneurship MAP102-4 Apple Device Development MAP103-5 Android Development using Android Studio MAP104-4 Database Design MAP105-4 Mobile Web: Cross-platform Development

#### **SEMESTER 2**

MAP201-5 Programming: Hands-on iOS Development MAP202-4 Mobile Web: PHP and MySQL MAP203-3 Mobile Infrastructure: Introduction to Enterprise MAP204-5 Hands-on Android Development MAP205-3 Project Management

# **Course Descriptions**

#### Semester 1

#### Information Technology Entrepreneurship (MAP101) (3 credits)

In this course, students will examine entrepreneurship as a fundamental skill for Information Technology (IT). Students will explore how to investigate and develop the key ingredients of a successful business plan. The focus of this course will be developing business skills and innovate attitudes essential for those who want to be: a founder of a technology start-up, a product manager working in technology start-up, or an agent of change in an existing company.

#### Apple Device Development (MAP102) (4 credits)

In this course, students will develop apps for mobile devices on the iOS platform. Apple's new Swift programming language and xCode development environment will be used. The focus of this course in programming is the development of user-interfaces and program logic for the iOS operating system.

#### Android Development using Android Studio (MAP103) (5 credits)

In this course, students will develop apps for mobile devices on the Android operating system. The course begins with the fundamentals of programming using Java. Later the student will move on to Android development using Android Studio. Weekly lab activities are used to reinforce student learning.

#### Database Design (MAP104) (4 credits)

In this course, students will learn database design in order to manage information in an enterprise. Learners will use the SQL language to define data structures and modify data using a relational database management system (RDBMS). Lessons within this course will include: querying, inserting, updating and deleting data from existing databases; implementing databases from a design,; and finally, designing a database to meet various business requirements. MySQL, MySQL Workbench, SQL DML, SQL DDL and database normalization rules are the main course topics. This course is a first course in database fundamentals that prepares the student for a role supporting information management within an enterprise.

#### Mobile Web: Cross-platform Development (MAP105) (4 credits)

In this course, students will learn how to develop web-based apps that can be used across all platforms including the desktop and various mobile devices. This is an intensive study of front-end application technologies such as HTML5, CSS3, and JavaScript. This is a lab focused course where students should be prepared to write and submit code for review every week.

#### Semester 2

#### Programming: Hands-on iOS Development (MAP201) (5 credits)

In this course, students will continue their study of mobile development for the iOS platform. The focus will be a student-driven, deeper dive into the study of various APIs such as location, data management, networking and internet, wearable technology, and game development.

#### Mobile Web: PHP and MySQL (MAP202) (4 credits)

In this course, students will create dynamic web applications using server-side scripting. Exception handling, database access, and user interface development will be covered. Advanced web scripting topics including MVC using PHP and using MySQL will be applied by students to the solution of more challenging programming problems.

#### Mobile Infrastructure: Introduction to Enterprise (MAP203) (3 credits)

In this course, students will study the basics of cloud computing. Topics covered will include: the various categories of cloud computing, the various cloud computing vendors, virtualization technology, mobile cloud computing, security, the business impact of cloud and bring your own device (BYOD) mobility, and more. Students will have the opportunity to examine current cloud computing vendors; research, develop, and present samples of cloud applications; and participate in a peer-teaching lab environment that helps to build collaboration and communication skills.

#### Hands-on Android Development (MAP204) (5 credits)

In this course, students will learn to develop Android apps in a hands-on, application- driven approach. In this second Android course, students will extend their skills by learning to research advanced Android Application Programming Interfaces (APIs) and crate increasingly complex applications. The final capstone project will be based on an individual or group app development scenario.

#### Project Management (MAP205) (3 credits)

This course provides a comprehensive overview of Project Management from an Information Technology perspective. The student will study and apply project management techniques from the various Project Management knowledge areas including project integration, change theory, scope, time, cost, quality, human resource, communications, risk and procurement management. The student will acquire practical skills in using various tools used in Project Management by applying knowledge learned in assigned projects.

# Network Architecture and Security Analytics

Section B.119 6/2/2020

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (2196)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

The Network Architecture and Security Analytics (NASA) program is designed to provide students with both the knowledge and skills to design the operation of an enterprise network as well as the knowledge and skills to analyze and secure networks in a broad range of employment fields.

Students will learn how networks are designed, created and maintained using the latest technologies. This program includes training in understanding and using operating systems, system administration, field of client/server computing, server virtualization, enterprise networks and the maintenance of existing computer networks. Students will acquire professional and entrepreneurial skills for industry and self-employment as well as gain a greater understanding of current industry trends and requirements.

In combination with network development students will acquire the capabilities to analyze and evaluate security risks and threats to physical and digital infrastructure, develop and implement security contingency planning, and lead the development of policies and procedures to ensure that security risk is minimized.

Security analytics, and the varying components that are integral to multiple layered defense strategies, will be explored. Effective and secure delivery and support of IT services, that meet a broad spectrum of business needs, will be a core learning component of this program.

This NASA program will give students the skills to ensure networks are protected as best possible from real threats presented by hackers, identity thieves and spammers. News reports about data breaches, security violations, privacy failures and other infrastructure failures highlight a growing threat to business and personal information. There are few people who have the skills and education needed to address the massive demand in this area and exciting career opportunities continue to grow.

The NASA program incorporates curriculum that prepares the student to obtain certification from Cisco Systems as a Cisco Certified Network Professional (CCNP) security specialist.

#### **PROGRAM OUTCOMES**

The graduate has reliably demonstrated the ability to:

- 1. Design an enterprise network addressing the needs specified by a business or client.
- 2. Perform network monitoring, analysis and troubleshooting to determine efficient and secure operations. This includes the analysis of intrusion detection/prevention systems and methods and system log analysis both manual and automatic, analyzing network traffic patterns.
- 3. Develop strategies for dealing with common network vulnerabilities and security issues to protect information in a business, industry or other organization.
- 4. Design multi-site enterprise operating system infrastructure using a security architecture framework, including Virtual Private Networks.
- 5. Design and implement secure wireless networks with wireless access points and router configuration as well as linking wireless access control to the corporate Active Directory user database, incorporating current security standards.

- 6. Design and implement a virtualization and cloud computing focused infrastructure environment specifically addressing security risks associated with incorporating virtualization into an organizations infrastructure.
- 7. Plan and configure web servers to conform to the corporate security policies.
- 8. Identify needs, and plan for IT network and security services to support an organization's business goals and objectives.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario College Diploma, Ontario College Advanced Diploma, or Degree in the field of computer systems technology, network architecture, computer engineering, information security or equivalent.

Applicants whose first language is not English, must provide proof of English proficiency. Sault College accepts the TOEFL, or IELTS, or equivalent test to satisfy our English admission requirements

# **CAREER PATHS**

#### **Possible Occupational Titles:**

- Networking Architect
- Network Designer
- Network Developer
- Network Specialist
- Security Analyst
- Security Engineer
- Security Consultant
- Security Administer
- Cryptographer
- Chief Information Officer

#### Areas of Employment:

- Health Care
- Education
- Banking
- Finance
- Industry
- Transportation
- Business
- Aviation

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$3,025.80	\$1,117.00	\$15,899.40	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

For more information contact Program Coordinator Bazlur Rasheed at 705.759.2554 ext 2668 or email <u>bazlur.rasheed@saultcollege.ca</u>

### **PROGRAM OF STUDY**

#### **SEMESTER 1**

NASA101-4 Networking Essentials and Management NASA102-4 Server Infrastructure & Security NASA103-3 IT Service Management NASA104-4 Fundamentals of Network Security NASA105-5 Virtualization Infrastructure

#### **SEMESTER 2**

NASA201-3 Web Programming and Security NASA202-3 Wireless Networks NASA203-5 Securing the Edge & Security Analytics NASA204-4 Virtual Private Networks NASA205-4 CISSP Preparation NASA206-2 Enterprise Network Design

#### **Course Descriptions**

#### Semester 1

#### Networking Essentials and Management (NASA101) (4 credits)

In today's technology driven environment end users just want to get work done and networking is an integral part of that effort. This course focuses on the network protocols and devices that enable them to function and how they are used to transmit data between senders and receivers.

#### Server Infrastructure & Security (NASA102) (4 credits)

In this course, you will plan, design and implement scenario based Active Directory Structures running various Windows services such as Storage Services, DHCP, DNS, NPS and Certificate Authority services in a multi-site Active Directory Forest. you will learn how to design/implement server roles and Active Directory structures in various work place scenarios.

#### IT Service Management (NASA103) (3 credits)

IT service management (ITSM) refers to the activities that are performed by an organization to plan, design, deliver, operate and control information technology services offered to customers. ITIL (Information Technology Infrastructure Library) is the leading standard of IT Service Management, providing a cohesive set of best practices for IT. Students in this course will learn key elements, concepts and terminology used in the ITIL Service Lifecycle, including the linkages between Lifecycle stages, the processes used and their contribution to Service Management practices.

#### Fundamentals of Network Security (NASA104) (4 credits)

This course provides an in-depth study of network security principles, standards, cryptography, best practices and current threats. Supported by extensive lab work, system vulnerabilities, network attacks will be investigated and solutions implemented using a variety of operating systems and security tools.

#### Virtualization Infrastructure (NASA105) (5 credits)

This course will cover the various technologies and business models related to virtualization and cloud computing. Students will deploy and manage a virtual infrastructure, taking into account the security

considerations. Specific topics will include active directory integration, network security policies, firewall configuration and effective use of privileges, roles and permissions.

#### Semester 2

#### Web Programming and Security (NASA201) (3 credits)

This course will delve into the current scripting and computer languages used by modern web clients and servers, with a focus on the programming methodologies used to prevent exploitation of web security vulnerabilities.

### Wireless Networks (NASA202) (3 credits)

This vendor-neutral course explores the physical and theoretical aspects of wireless network signals, wireless devices, protocols and security. Topics include wireless standards, radio frequency fundamentals, spread spectrum technologies and wireless intrusion and site survey fundamentals. The course helps prepare students interested in completing the CWNP Certified Wireless Network Administrator exam.

#### Securing the Edge & Security Analytics (NASA203) (5 credits)

This course will study the theory and hands on procedures required to monitor and secure a network. Edge and internal security principles will be studied in order to protect the network from both external and internal threats. The course will explore the principles of Network Security Monitoring along with its implementation and configuration. It delivers technical knowledge, insight, and hands-on training needed to prepare a network against and monitor a network for intrusion.

#### Virtual Private Networks (NASA204) (4 credits)

This course will examine the use of virtual private network (VPN) technologies to provide secure communications, and the implementation and configuration of VPN technologies. The course explores site-to-site and multi-site VPN solutions using firewalls and routers, as well as several remote-access VPN solutions.

#### CISSP Preparation (NASA205) (4 credits)

This course provided students with a comprehensive overview of the domains or areas of study in the CISSP (Certified Information Systems Security Professional) certification. Domains include; Security and Risk Management), Asset Security, Security Engineering, Communication and Network Security, Identity and Access Management, Security Assessment and Testing, Security Operations, Software Development Security. Throughout the course each domain will be studied in more detail covering the topics in the CISSP examination.

#### Enterprise Network Design (NASA206) (2 credits)

This course will examine the business-needs based design of enterprise networks. Analysis will focus on selecting technologies to securely implement backbone, distribution and access layers utilizing the most appropriate protocols. Models are used to answer management, security, resiliency, and flexibility concerns in office, mobile, virtual, cloud and data centre environments.

# **Police Foundations**

**Ontario College Diploma (2 Years- 4 Semesters ) (1202)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

#### Top 5 reasons to choose Sault College for Justice Studies:

#### 1. Ranked Number One by students in the province!

The Police Foundations program (PFP) has been rated number one in the province for the past three years in a row by students that are highly satisfied with their program of study.

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#### 2. Graduate with two diplomas and a University degree!

By enrolling in this program followed by attending our nearby partner University, Lake Superior State University, you can graduate with both a College diploma and a University degree in three years, or you can graduate with two College diplomas and a University degree in 4 years, saving anywhere from \$27,500 to \$38,000 in educational costs.

#### 3. The only program in North America partnered with Crime Stoppers for patrol experience!

Through the College's close relationship with the police, the crime rate has decreased significantly in the area patrolled, in large part due to our students' presence.Crime Stoppers' new headquarters will be re-located to the new police resource centre on Gore Street. You can apply your learning and gain experience soon after enrolling in our college program.

# 4. Successful graduation from either diploma in our Justice Studies program area will exempt students from taking the security guard and private investigator training sanctioned by the ministry.

We are one of only a few colleges with this accreditation.

**5. Small class size!** - Our low student to professor ratio provides excellence in education by giving one-on-one attention, teaching and guiding not often found in larger centres.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

#### A graduate of the Police Foundations Program at Sault College will reliably demonstrate the ability to:

- 1. complete all tasks in compliance with pertinent legislation, as well as policing standards, regulations and guidelines.
- 2. analyze all relevant information and make effective and legally defensible decisions in accordance with ethical and professional standards.
- 3. be accountable for ones actions when carrying out all tasks.
- 4. develop and implement ongoing effective strategies for personal and professional development.
- 5. ensure the respect of human rights and freedoms in all interactions.

- 6. work co-operatively in multidisciplinary teams to achieve mutual goals.
- 7. collaborate in the development and implementation of community policing strategies.
- 8. monitor, evaluate and document behaviours, situations and events accurately and discreetly in compliance with legal, professional, ethical and organizational requirements.
- 9. mitigate risks and maintain order by applying effective strategies in crisis, conflict and emergency situations.
- 10. take positive actions to help crime victims.
- 11. conduct investigations by collecting, documenting, preserving and presenting admissible evidence.

#### <u>Reference</u>

Ministry of Training, Colleges and Universities Police Foundations Program Standards (MTCU 53008), August 2010.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status.

#### ACADEMIC RECOMMENDATIONS

Graduates of the Police Foundations program should be aware that to be eligible for employment with police agencies in Ontario, they may be required to write a certification examination, as well as meet fitness, mathematics, communications, reasoning, hearing, and vision requirements. In order to secure employment in policing after graduation, the student must be a Canadian citizen or permanent resident and a Grade 12 graduate.

A valid driver's license is also a requirement for all employment in policing. We recommend that students entering the program have computer literacy, which includes having some keyboarding and word processing skills.

# **CAREER PATHS**

Graduates may find employment with municipal and provincial police forces, the RCMP, private and industrial security, customs, military police of the federal and provincial enforcement agencies. Students will be subject to all requirements of the Ontario Constable selection process and local police requirements when applying for a position as a police constable in Ontario.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit

your Student Portal to view your Schedule of Fees.

#### **DRESS CODE**

Uniforms will be discussed on the first day of school, during orientation. The uniform consists of: Uniform Shirt, Tactical Pants, Belt and Jacket.

#### **OTHER INFORMATION**

September and January Intakes are available for this program. Please contact the Registrar's Office for further information.

For more information contact either Program Coordinator Jeff Barnes at 705.759.2554, ext 2617, or via email at <u>jeff.barnes@saultcollege.ca</u> or Program Coordinator Frank Caputo at 705.759.2554, ext 2796, or via email at <u>frank.caputo@saultcollege.ca</u>.

#### **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I PFP102-3 Psychology PFP108-3 Lifestyle Management I PFP202-3 Interpersonal and Group Dynamics PFP301-3 Criminal and Civil Law GEN100-3 Global Citizenship PFP101-3 Canadian Criminal Justice

#### **SEMESTER 2**

PFP204-3 Communications II PFP208-3 Lifestyle Management II PFP209-3 Diversity/First Nations Issues PFP211-3 Political Science and Public Administration PFP303-3 Police Powers I PFP306-3 Community Policing I

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 3**

PFP302-3 Criminal Code PFP304-3 Interviewing and Investigation PFP308-3 Lifestyle Management III PFP401-3 Provincial Offences PFP403-3 Police Powers II PFP404-3 Investigation and Evidence

#### **SEMESTER 4**

PFP106-3 Principles of Ethical Reasoning PFP201-3 Criminology PFP212-3 Police Response to Mental Health and Addictions Issues PFP305-3 Youth in Conflict with the Law PFP402-3 Criminal Code and Federal Statute PFP405-3 Conflict Management PFP410-3 Traffic Management PFP411-3 Applicant and Testing Procedures

# **Course Descriptions**

#### Semester 1

Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Psychology (PFP102) (3 credits)

A study of the science of psychology, its methods, concepts, and theories, including the following topic areas: (i) the biological bases of behaviour and the perceptual process; (ii) intelligence, learning, and memory; (iii) motivation and emotion, and (iv) states of awareness. Psychological concepts will be studied with a view towards how they can be applied to enhance the student's understanding of psychological adaptation and the cases and consequences of human behaviour.

#### Lifestyle Management I (PFP108) (3 credits)

This course introduces the student to the concept of wellness and provides practical strategies for developing a healthy lifestyle. Topics include: positive lifestyle choices, self management and behaviour change techniques, exercise prescription and fitness training methods. Through participation in hands on learning experiences, students gain the knowledge and skills necessary to make positive lifestyle changes. If students choose to incorporate their knowledge and skills into daily living, they will see an overall increase in personal wellness and fitness, as well as improved performance on law enforcement specific physical performance tests.

#### Interpersonal and Group Dynamics (PFP202) (3 credits)

This is an introductory course in group behaviour and interpersonal relations theories. The aim is to develop interpersonal effectiveness in teams and as individual team members through the use of effective communication skills. Emphasis is placed on cohesive group decision-making through a democratic problem-solving process. The course focuses on establishing group cohesiveness among divergent individual communities.

#### Criminal and Civil Law (PFP301) (3 credits)

This course deals with the fundamentals of criminal law, including: analyzing the elements of an offence, classification of offences, and the identification of defenses used in criminal cases. The course will also introduce the student to the rights of citizens in contracts, landlord and tenant situations, labour, and family law. Charter implications, as well as liability under tort law, will be reviewed and discussed. It is also designed to help the student develop research and analysis skills so that they can locate, interpret, and apply both statute and case law to investigations.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to

become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

### Canadian Criminal Justice (PFP101) (3 credits)

This course is designed to introduce the student to the historical, social, cultural, and legal factors necessary for an understanding of how justice is administered in Canada. Topics include: origins of law, order and social control in society, the emergence of dispute settlement mechanisms, the evolution of social legal behaviour with accompanying structures or systems, and applied research methods. The historical, contemporary, and probable future of each of the components of the legal and the justice systems will be presented. The dynamics of the interaction between society, the individual, and the inter-related components of the criminal justice system will be examined. The course will also introduce some contemporary criminological findings as well as cover major concepts, issues, and debates surrounding society's approach to crime and justice.

#### Semester 2

#### Communications II (PFP204) (3 credits)

In this advanced course, students write notebook entries and reports following guidelines used by police agencies. They will complete exercises that familiarize them with professional communication practices including business writing. Students will develop and enhance their reading, listening, and observational skills, and acquire effective presentation skills.

#### Lifestyle Management II (PFP208) (3 credits)

This course builds on the knowledge and skills developed in Fitness and Lifestyle Management I. Topics include: coronary heart disease prevention, basic nutrition and heart-smart eating, body composition management, cardiovascular fitness assessment and exercise participation and prescription. Through participation in a variety of learning experiences, students gain the knowledge and skills necessary to make positive lifestyle changes with an emphasis on cardiovascular health. If students choose to incorporate their knowledge and skills into daily living, they will see an overall increase in personal wellness and fitness, as well as improved performance on law enforcement specific fitness tests.

#### Diversity/First Nations Issues (PFP209) (3 credits)

The first half of this course introduces the students to the concepts of culture, ethnicity and race. It focuses on the fundamental issues of respect, acceptance and tolerance of diverse groups. The course will review the history of ethnic and race relations in Canada and analyze the current racial ethnic and diverse composition of Canadian society. Cultural/Social/Community organization of minority groups will be an important focus of this course. The second part of this course will increase the knowledge and awareness of important issues in the aboriginal culture of Canada. This will be accomplished through cultural analysis of a First Nation by studying its history, geography, social institutions, religion, aesthetics, living conditions and language. The legal status of the aboriginal people will be explored along with Aboriginal Rights and self determination and other critical issues related to land claims, justice and social services.

# Political Science and Public Administration (PFP211) (3 credits)

The first part of this course is designed to introduce the student to the most important political institutions in Canada and to provide a better understanding of the issues that have both united and divided the country. It will also enable students to identify the ideas and concepts of some of the outstanding political and economic philosophers who have shaped the modern world. The law making process at the various levels of government will be examined and issues related to the enactment of contemporary legislation will be addressed. The second part of this course focuses on the development of modern management including organizational public administration theory. Students will explore the organizational administration workings and interaction between provincial, federal and municipal governments. Developing an awareness of dominant and underlying issues that affect the formal and informal political

arena are the important elements of this course.

#### Police Powers I (PFP303) (3 credits)

This introductory level course will examine pertinent sections of the Canadian Charter of Rights and Freedoms and their impact on Canadian criminal procedure. Citizen and police arrest and release authorities, police powers of search and seizure, with and without warrant, and the use and implications of police discretion will be the main themes of the course. The student will become familiar with police terminology and with the documentation required to affect arrest and release.

#### Community Policing I (PFP306) (3 credits)

This course will introduce students to the theory and models of community policing. Problem solving modes and alternate dispute resolution strategies will be examined. Community development and involvement in dispute resolution will be discussed. Public relations and crime prevention strategies will be researched and explored.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 3

#### Criminal Code (PFP302) (3 credits)

This course will introduce students to the most common Criminal Code offences. Offences against the person, property, weapons, and public order offences will be examined. Students will apply knowledge acquired in Criminal and Civil Law to be able to determine the facts in issue for the offences discussed. Students will also research case law related to offences and determine its impact on law enforcement.

#### Interviewing and Investigation (PFP304) (3 credits)

This course will enable students to recognize and develop observation and communication skills related to the interviewing of victims, witnesses, and accused persons. Students will learn the theory and the basic steps of an investigation and the legal issues related to the completion of a successful investigation. Students will be required to maintain a police notebook for the duration of this course.

#### Lifestyle Management III (PFP308) (3 credits)

This course builds on the learning outcomes of Fitness and Lifestyle Management I and II which focus on wellness and the development of a healthy lifestyle.

Topics include: positive lifestyle choices, self management and behaviour change techniques, managing stress and shift work, exercise prescription and group leadership. Through participation in in-class fitness activities and self-directed fitness training, students will work towards improving their fitness level and meeting the employment standards on law enforcement specific fitness tests.

#### Provincial Offences (PFP401) (3 credits)

This course will focus on the most common provincial offences. After examining the processes that are established in the Provincial Offences Act, this course will examine the purpose of each of the statutes, arrest, search, seizure, and any other special authorities contained in those most commonly used Ontario Provincial Statutes. The elements of offences, possible defenses, and completion of Provincial Offence Notices for provincial and municipal offences will be highlighted.

#### Police Powers II (PFP403) (3 credits)

This course is a continuance of Police Powers I and will focus on police governance and accountability. Issues related to the Police Services Act, police complaints, First Nations policing and management and labour issues will be examined. Use of force theory, law, and other legal issues related to the use of force will be discussed. Students will also examine theory related to officer safety issues.

#### Investigation and Evidence (PFP404) (3 credits)

This advanced level course will examine the requirements of a continuing investigation, the use of forensics, and the care and handling of evidence. Discussed will be the rules of evidence, charter implications and other issues related to the collection and presentation of evidence in a court of law.

#### Semester 4

#### Principles of Ethical Reasoning (PFP106) (3 credits)

This course focuses upon ethical issues and dilemmas faced by individuals as citizens and as professionals. It helps students to clarify their values and establish a framework for ethical decision making. Ethical issues of a general nature, which relate to a wide variety of concerns are examined. The student will investigate the ethical codes of their chosen vocation and apply ethical analysis models to dilemmas which typify those often encountered in the profession.

#### Criminology (PFP201) (3 credits)

This course provides an examination of various theoretical explanations of criminal and deviant behaviour including the sociological, biological, and psychological perspectives. Criminological theory related to various types of criminal activity and the reality of crime in Canada is examined through crime statistics the correlation of criminal behaviour. The impact of theory on the development and the effectiveness of the criminal justice system are discussed with an emphasis on future trends within the system.

#### Police Response to Mental Health and Addictions Issues (PFP212) (3 credits)

This course will use an interdisciplinary framework to develop an understanding of mental health and addictions issues as they relate to policing. Students will learn current legislation and policies to effectively and respectfully work with people affected by mental health and addictions issues. Relevant information from the fields of sociology, psychology and criminology including theories, social and criminological trends, history and personal/interpersonal challenges will be addressed.

# Youth in Conflict with the Law (PFP305) (3 credits)

Based on criminal law, this course provides an historical overview of youth and the law and includes a detailed examination of the Young Offenders Act (1982). Students will become familiar with jurisdictional issues, court procedures, dispositions, and alternative measures. Other issues such as community services, treatment facilities, and a review of the Child and Family Services Act (1984) will be studied.

# Criminal Code and Federal Statute (PFP402) (3 credits)

The student will continue the study of criminal offences. Emphasis will be placed in understanding the components of related federal statutes including: The Controlled Drugs and Substances Act, the Young Offenders Act, the Interpretation Act, the Identification of Criminals Act, the Charter of Rights and Freedoms, the Indian Act, and the Firearms Act.

#### Conflict Management (PFP405) (3 credits)

This course is designed to foster confidence and competence when dealing with potentially violent situations. The student learns to recognize behavioural responses to crisis and to respond with non-violent conflict resolutions through verbal and non-verbal intervention. Interpersonal and group dynamics, problem solving, and adaptive skills as they relate to conflict resolution and mediation will be explored.

#### Traffic Management (PFP410) (3 credits)

In this half course, students will develop the knowledge, skills and abilities to interpret and apply sections of the Highway Act of Ontario and its regulations. Students will practice locating topics and regulations in the Act, will master the definitions required to interpret Traffic Law and will apply the law, concerning Police authorities, driver's licences, permits and rules of the road. Students will develop and practice procedures for dealing with motor vehicle stops. In the second half of this course, students will develop the knowledge, skills and ability to apply Criminal Code operating Offences to real life scenarios. Students will

practice completing provincial offence notices and will use them to testify in mock court situations, according to professional requirements. Students will also develop and employ strategies and procedures for managing an accident scene.

#### Applicant and Testing Procedures (PFP411) (3 credits)

This course is designed to introduce students to the proposed Provincial Qualify Examination for Police Recruits. In addition to a practice exam based on the content of the proposed PQE, students will be introduced to strategies for success in other police testing requirements, such as the GAT-B and WCT. Strategies for success will include time management and reading comprehension as it applies to the specific tests they will be required to pass before acceptance as a candidate for employment in policing.

# Protection, Security and Investigation

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Ontario College Diploma (2 Years - 4 Semesters ) (1225) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

The Protection, Security and Investigation program prepares graduates in a wide range of skills, enabling them to pursue careers in customs administration and brokering and public safety. The program has a common first year with the other criminal justice cluster program, Police Foundations. The program deals with the development, purpose, and operation of the legal system generally, and law enforcement related to customs, immigration, and security specifically. It also involves knowledge of security operations to protect persons and property in both the private and industrial settings. A new component in the program will introduce students to firefighter and emergency care operations. Understanding human behaviour and the development of strong interpersonal and communications skills will prepare the graduate to function more effectively and humanely in professions which demand mature and responsible reactions. Below are the top 5 reasons to take Protection, Security and Investigation:

**Graduate with two diplomas and a University degree!** - By enrolling in this program followed by attending our nearby partner University, Lake Superior State University, you can graduate with both a College diploma and a University degree in three years, or you can graduate with two College diplomas and a University degree in 4 years, saving anywhere from \$27,500 to \$38,000 in educational costs.

**The only program in North America Partnered with Crime Stoppers for patrol experience!** - Through the College's close relationship with the police, the crime rate has decreased significantly in the area patrolled, in large part due to our students presence. Crime Stoppers' new headquarters will be re-located to the new police resource centre on Gore Street. You can apply your learning and gain experience soon after enrolling in our College program.

Successful graduation from either diploma in our Justice Studies program area will exempt student from taking the security guard and private investigator training sanctioned by the Ministry! - We are one of only a few Colleges with this accreditation.

**Small class size!** - Our low student to professor ratio provides excellence in education by giving one-on-one attention, teaching and guiding not often found in larger centres.

**Ranked Number One by students in the province!** - The Protection Security and Investigation program (PSI) has been rated number one in the province for the past four years in a row by students that are highly satisfied with their program of study.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

A graduate of the Protection, Security and Investigation at Sault College will reliably demonstrate the ability to:

- 1. work in compliance with established standards and relevant legislation in the protection, security and investigation fields.
- 2. make decisions in a timely, effective and legally defensible manner to uphold protection and security.
- 3. carry out delegated duties and responsibilities in compliance with organizational policies and procedures.
- 4. act equitably and justly with diverse populations.
- 5. work effectively as a member of a protection and security team.
- 6. prevent and resolve crisis, conflict and emergency situations by applying effective techniques.
- 7. conduct and/or contribute to investigations by collecting, preserving and presenting admissible evidence.
- 8. monitor, evaluate and accurately document behaviours, situations and events.
- 9. develop and implement ongoing

#### <u>Reference</u>

Ministry of Training, Colleges and Universities Protection, Security and Investigation Program Standards (MTCU 53007), January 2010.

#### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C, or mature student status.

#### ACADEMIC RECOMMENDATIONS

We recommend that students entering the program have some keyboarding and word processing skills.

# **CAREER PATHS**

Graduates of the Protection, Security and Investigation program may find employment with Canadian Border Services, customs brokering operations, security investigations, industrial security, firefighting, emergency care, Military Police and various Police agencies.

#### **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,648.20	\$1,117.00	\$14,838.60	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

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# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I PFP102-3 Psychology PFP108-3 Lifestyle Management I PFP202-3 Interpersonal and Group Dynamics PFP301-3 Criminal and Civil Law GEN100-3 Global Citizenship PFP101-3 Canadian Criminal Justice

#### **SEMESTER 2**

PFP204-3 Communications II PFP208-3 Lifestyle Management II PFP209-3 Diversity/First Nations Issues PFP211-3 Political Science and Public Administration PFP303-3 Police Powers I PFP306-3 Community Policing I

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 3**

CJS225-4 Introduction to Canadian Immigration CJS231-3 Use of Force CJS414-4 Introduction to Customs Law CJS415-4 Introduction to Private Security and Loss Prevention PFP304-3 Interviewing and Investigation PFP401-3 Provincial Offences PFP404-3 Investigation and Evidence

#### **SEMESTER 4**

CJS221-5 Introduction to Corrections CJS313-4 Crisis Intervention in Criminal Justice CJS420-3 Security Hardware CJS428-3 Introduction to Fire Science CJS450-4 Customs Procedures PFP106-3 Principles of Ethical Reasoning PFP201-3 Criminology PFP212-3 Police Response to Mental Health and Addictions Issues

# **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

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# Interpersonal and Group Dynamics (PFP202) (3 credits)

This is an introductory course in group behaviour and interpersonal relations theories. The aim is to develop interpersonal effectiveness in teams and as individual team members through the use of effective communication skills. Emphasis is placed on cohesive group decision-making through a democratic problem-solving process. The course focuses on establishing group cohesiveness among divergent individual communities.

#### Criminal and Civil Law (PFP301) (3 credits)

This course deals with the fundamentals of criminal law, including: analyzing the elements of an offence, classification of offences, and the identification of defenses used in criminal cases. The course will also introduce the student to the rights of citizens in contracts, landlord and tenant situations, labour, and family law. Charter implications, as well as liability under tort law, will be reviewed and discussed. It is also designed to help the student develop research and analysis skills so that they can locate, interpret, and apply both statute and case law to investigations.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and

Cultural Understanding General Education themes.

#### Canadian Criminal Justice (PFP101) (3 credits)

This course is designed to introduce the student to the historical, social, cultural, and legal factors necessary for an understanding of how justice is administered in Canada. Topics include: origins of law, order and social control in society, the emergence of dispute settlement mechanisms, the evolution of social legal behaviour with accompanying structures or systems, and applied research methods. The historical, contemporary, and probable future of each of the components of the legal and the justice systems will be presented. The dynamics of the interaction between society, the individual, and the inter-related components of the criminal justice system will be examined. The course will also introduce some contemporary criminological findings as well as cover major concepts, issues, and debates surrounding society's approach to crime and justice.

#### Semester 2

#### Communications II (PFP204) (3 credits)

In this advanced course, students write notebook entries and reports following guidelines used by police agencies. They will complete exercises that familiarize them with professional communication practices including business writing. Students will develop and enhance their reading, listening, and observational skills, and acquire effective presentation skills.

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This course builds on the knowledge and skills developed in Fitness and Lifestyle Management I. Topics include: coronary heart disease prevention, basic nutrition and heart-smart eating, body composition management, cardiovascular fitness assessment and exercise participation and prescription. Through participation in a variety of learning experiences, students gain the knowledge and skills necessary to make positive lifestyle changes with an emphasis on cardiovascular health. If students choose to incorporate their knowledge and skills into daily living, they will see an overall increase in personal wellness and fitness, as well as improved performance on law enforcement specific fitness tests.

#### Diversity/First Nations Issues (PFP209) (3 credits)

The first half of this course introduces the students to the concepts of culture, ethnicity and race. It focuses on the fundamental issues of respect, acceptance and tolerance of diverse groups. The course will review the history of ethnic and race relations in Canada and analyze the current racial ethnic and diverse composition of Canadian society. Cultural/Social/Community organization of minority groups will be an important focus of this course. The second part of this course will increase the knowledge and awareness of important issues in the aboriginal culture of Canada. This will be accomplished through cultural analysis of a First Nation by studying its history, geography, social institutions, religion, aesthetics, living conditions and language. The legal status of the aboriginal people will be explored along with Aboriginal Rights and self determination and other critical issues related to land claims, justice and social services.

#### Political Science and Public Administration (PFP211) (3 credits)

The first part of this course is designed to introduce the student to the most important political institutions in Canada and to provide a better understanding of the issues that have both united and divided the country. It will also enable students to identify the ideas and concepts of some of the outstanding political and economic philosophers who have shaped the modern world. The law making process at the various levels of government will be examined and issues related to the enactment of contemporary legislation will be addressed. The second part of this course focuses on the development of modern management including organizational public administration theory. Students will explore the organizational administration workings and interaction between provincial, federal and municipal governments. Developing an awareness of dominant and underlying issues that affect the formal and informal political arena are the important elements of this course.

#### Police Powers I (PFP303) (3 credits)

This introductory level course will examine pertinent sections of the Canadian Charter of Rights and Freedoms and their impact on Canadian criminal procedure. Citizen and police arrest and release authorities, police powers of search and seizure, with and without warrant, and the use and implications of police discretion will be the main themes of the course. The student will become familiar with police terminology and with the documentation required to affect arrest and release.

#### Community Policing I (PFP306) (3 credits)

This course will introduce students to the theory and models of community policing. Problem solving modes and alternate dispute resolution strategies will be examined. Community development and involvement in dispute resolution will be discussed. Public relations and crime prevention strategies will be researched and explored.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 3

#### Introduction to Canadian Immigration (CJS225) (4 credits)

This course will give the student an overview of Canada's Immigration operations and procedures. It will introduce the department's immigration law, as expressed in the Immigration Act and Regulations. The student will develop an understanding of Canada's main objectives with respect to immigration.

#### Use of Force (CJS231) (3 credits)

Students will gain an understanding and knowledge of rules and regulations governing the application of force and the physical signs related to distress when dealing with confrontational situations. Upon completion of this course, students will demonstrate a physical ability to complete all defensive tactics required to project themselves and others in the discharge of their duties related to the Ontario Securities Act rules and regulations.

#### Introduction to Customs Law (CJS414) (4 credits)

Upon successful completion of this course, students will have the basic knowledge and skills required by a customs officer. The student will learn to recognize the violations under the Customs Act or other relevant legislation enforced by Canada Customs. Students will also learn to deal with enforcement related concerns.

# Introduction to Private Security and Loss Prevention (CJS415) (4 credits)

This course will assist the student to develop an understanding of the principles of security and to become familiar with security methods and equipment. The student will also be made aware of security hazards at industrial and commercial establishments and how to respond to these hazards. Pertinent legislation will be reviewed and its impact on security operations discussed.

#### Interviewing and Investigation (PFP304) (3 credits)

This course will enable students to recognize and develop observation and communication skills related to the interviewing of victims, witnesses, and accused persons. Students will learn the theory and the basic steps of an investigation and the legal issues related to the completion of a successful investigation. Students will be required to maintain a police notebook for the duration of this course.

#### Provincial Offences (PFP401) (3 credits)

This course will focus on the most common provincial offences. After examining the processes that are established in the Provincial Offences Act, this course will examine the purpose of each of the statutes, arrest, search, seizure, and any other special authorities contained in those most commonly used Ontario Provincial Statutes. The elements of offences, possible defenses, and completion of Provincial Offence Notices for provincial and municipal offences will be highlighted.

#### Investigation and Evidence (PFP404) (3 credits)

This advanced level course will examine the requirements of a continuing investigation, the use of forensics, and the care and handling of evidence. Discussed will be the rules of evidence, charter implications and other issues related to the collection and presentation of evidence in a court of law.

#### Semester 4

#### Introduction to Corrections (CJS221) (5 credits)

This course is an examination of the nature and functions of the principle components of correctional services in Canadian society. Students will examine the history of corrections, correctional law, current models of correctional policy, policy making in corrections, correctional structures, treatment programs and their delivery, community based corrections and the future of corrections in Canada.

#### Crisis Intervention in Criminal Justice (CJS313) (4 credits)

This course deals with the stress and crisis of Law Enforcement. The course will examine the relationship of the Law Enforcement officer with his/her own stress and their ability to respond to crisis situations. Along with the theories related to intervention, students will also examine use of force legislation and policies, the use of force continuum and defensive tactics when non-violent attempts fail.

#### Security Hardware (CJS420) (3 credits)

This course will introduce the student to the various categories of protective hardware, their application and limitations. Hands-on opportunities will allow the student to see and use a variety of hardware components and develop skills in applying hardware to selected facilities. Software applications which support security options will also be examined and utilized.

#### Introduction to Fire Science (CJS428) (3 credits)

This course will cover material from a scientific perspective. Elements of Chemistry, Physics and Math are discussed to develop an understanding of the chemistry of fires and the operation of fire fighting equipment. Characteristics of matter exposed to heat will be introduced to study the reaction that heat has on all forms of matter during fire fighting operations. Included in this course are the principles of hydraulics and formulas related to pump operation and water flow. This course will also introduce the student to the realities of dealing with hazardous materials. The fundamentals NFPA training and the recognition, control and evaluation of hazards are examined. Students will develop skills to interpret safety data sheets and to determine the appropriate course of action to take for the hazard present.

#### Customs Procedures (CJS450) (4 credits)

The Customs Brokering course has now been combined into the Customs Procedures course. The Customs procedures course stays the same, but an extra module has been added to introduce some of the material that was in the Customs Brokering course. Module 12 will contain an overview of the Customs commercial operation and procedures. The Student will able to develop an understanding of the import process, the release function and accounting procedures. The course will help the student understand topics such as compliance verification, enforcement procedures, refunds, appeals and agency initiatives. The student will also be able to prepare and complete various commercial documentations.

#### Principles of Ethical Reasoning (PFP106) (3 credits)

This course focuses upon ethical issues and dilemmas faced by individuals as citizens and as professionals. It helps students to clarify their values and establish a framework for ethical decision making. Ethical issues of a general nature, which relate to a wide variety of concerns are examined. The student will investigate the ethical codes of their chosen vocation and apply ethical analysis models to dilemmas which typify those often encountered in the profession.

#### Criminology (PFP201) (3 credits)

This course provides an examination of various theoretical explanations of criminal and deviant behaviour including the sociological, biological, and psychological perspectives. Criminological theory related to various types of criminal activity and the reality of crime in Canada is examined through crime statistics the

correlation of criminal behaviour. The impact of theory on the development and the effectiveness of the criminal justice system are discussed with an emphasis on future trends within the system.

#### Police Response to Mental Health and Addictions Issues (PFP212) (3 credits)

This course will use an interdisciplinary framework to develop an understanding of mental health and addictions issues as they relate to policing. Students will learn current legislation and policies to effectively and respectfully work with people affected by mental health and addictions issues. Relevant information from the fields of sociology, psychology and criminology including theories, social and criminological trends, history and personal/interpersonal challenges will be addressed.

# **Digital Film Production**

**Ontario College Diploma (2 Years - 4 Semesters ) (1097)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

If you want to explore an incredibly exciting field, consider this 2-year diploma program. It is the perfect fit for anyone who is passionate about movies and television, has always dreamed of being a filmmaker, loves storytelling, enjoys working with advanced technology or just wants to embrace their creativity. The program is also a marketable complement to any existing degree or diploma as the opportunities in this field are numerous and varied.

The film and television industry in Canada and on an international level is thriving with a growing number of major feature films shot in the Sault Ste. Marie area including on the Sault College campus! With so many entertainment and new media outlets, the global appetite for fresh and original content is virtually insatiable. Our goal is to train the digital storytellers of today and tomorrow who can produce these film projects. This is a field in the fine arts that values both creative and technical skills and is based on strong teamwork, smart business sensibilities and unique ideas. Maybe this is exactly what you are looking for!

Our unique program will cover the entire filmmaking process from idea development and scripting, through production into post-production and distribution. Students will focus on Producing, Directing, Screenwriting, Cinematography, Editing and Sound work. They will graduate with a portfolio of high quality, story-driven projects including short films, PSAs/commercials and a factual television pilot. Classes will cover both Feature/Short Film Production and Television Series Production. In addition to traditional, narrative filmmaking, a core focus of the program will be the growing industry need for factual and reality content for television and web. We will also address the complex, business side of the industry including networking, financing, job hunting and film festivals. Students will learn through access to advanced technology and software and a combination of hands-on classes, personal projects, lectures, guest speakers, screenings, work placement and community/client opportunities.

The program will also take advantage of everything the Sault area, Algoma region and College can offer including opportunities to work with the local theatre/acting community for narrative short film projects, interning options on local film productions as well as connections with existing college programs such as: aviation, culinary arts, adventure recreation and natural environment experiences to produce factual pilot projects. All with the added bonus of our campus being situated in one of the most beautiful parts of our country!

#### **PROGRAM OUTCOMES**

# A graduate of the Digital Film Production Program at Sault College will reliably demonstrate the ability to:

- 1. Create independent digital film projects using development, scripting, pre-production, production and post-production techniques.
- 2. Work within a digital film production team in various industry capacities and roles on short projects.
- 3. Schedule and budget for various types of digital film productions with different scopes.
- 4. Capture professional quality moving images using the appropriate camera/lighting equipment and techniques.
- 5. Develop a portfolio of at least 3 short films and 1 television pilot to show creative and professional skills and abilities in digital filmmaking.

- 6. Write story-driven, visual and cinematic scripts that fit within proper/professional screenwriting format and style with a focus on effective dialogue, strong structure and character development.
- 7. Record and mix multi-track sound in a digital format using industry standard equipment and software.
- 8. Research, pitch, produce, package, market and distribute digital film projects using industry and new media outlets.
- 9. Edit digital video on non-linear, industry standard software and equipment.

#### **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma or Mature Student Status

# **CAREER PATHS**

Graduates may work as Independent Filmmakers, Screenwriters, Producers, Production Managers, Production Coordinators, Production Assistants, Assistant Directors, Directors, Sound Recordists, Sound Mixers, Editors, Editorial Assistants, Camera Operators and Camera Assistants. They may also gain employment at a variety of companies in roles involving film development, distribution, production, post-production, technical, festival and broadcasting in administrative, business, sales, finance and management capacities.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,517.00	\$15,180.80	\$1,977.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

What you can expect:

- Small Classes with a healthy student/teacher ratio that will allow for a lot of one on one time with your instructors.
- Access to new equipment and software (all dictated by current industry trends).
- To graduate with a demo reel, resume and references and possibly even broadcast credits.

You will also be part of something that is brand new and you'll have the opportunity to shape the program with us!

For more information contact Program Coordinator Frank Salituri at 705.759.2554 ext 2793 or email <u>frank.salituri@saultcollege.ca</u>

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

FPD114-4 Production I FPD116-2 Introduction to Pre Production FPD119-3 Screenwriting I FPD129-3 Film Fundamentals FPD130-3 Introduction to Post Production FPD140-3 Visual Communication

#### **SEMESTER 2**

FPD121-3 Cinematography and Lighting FPD122-3 Screenwriting II FPD125-4 Production II FPD126-5 Short Film I FPD128-3 Television Development I

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 3**

FPD233-2 Directing Workshop FPD235-5 Short Fillm II FPD236-4 Advanced Post Production FPD238-3 Television Production II GEN100-3 Global Citizenship

#### **SEMESTER 4**

FPD240-6 Short Film III FPD242-2 Producing, Freelancing and the Business of the Film Industry FPD243-2 Specialized Workshop FPD244-4 Industry Work Placement Session FPD248-3 Television Development III

# **Course Descriptions**

#### Semester 1

#### Production I (FPD114) (4 credits)

This entry-level course will introduce students to the film industry and all aspects of a film set/production. Students will get hands on experience with equipment including lights, lenses, camera and grip equipment. The content and skills attained in this course will be a prerequisite for future courses in the program.

#### Introduction to Pre Production (FPD116) (2 credits)

This course will begin to explore important elements of the creative development process and how a project moves into pre-production. Students will learn how to schedule, budget and prepare for a shoot by understanding crewing, casting, location scouting and how to run effective production meetings. Students

will be able to utilize this knowledge in their own work.

#### Screenwriting I (FPD119) (3 credits)

Students will learn how to tell visual and cinematic stories. They will explore the importance of strong story telling, idea development, pitching, writing log lines, summaries, outlines, treatments and writing without dialogue. This course will give students the foundation for industry writing skills including the use of proper format, structure and form.

#### Film Fundamentals (FPD129) (3 credits)

This course will provide students with an introduction to the history of film and an overview of the fundamental components that contribute to modern film language. Through the evaluation of short films and feature film clips, students will explore the elements of: lighting, shot composition, types of shots, moving shots, colour correction, art direction, production design, props, make up, wardrobe, screenwriting, visual effects, practical special effects, locations, sets, sound, music, titles and actor performance. Students will learn about the evolution from photo chemical motion picture film to digital.

#### Introduction to Post Production (FPD130) (3 credits)

This course will cover an introduction to nonlinear, digital picture editing. It will give students the skills to complete their own projects as well as prepare them for their advanced second year post-production class. They will learn about both the creative and artistic side of post-production as well as the technical aspects. The course will cover importing, exporting, logging and organizing footage, picture editing, basic sound mixing, introduction to titles and colour correction.

#### Visual Communication (FPD140) (3 credits)

This course will begin to explore important elements of visual communication and how it relates to the organization of elements in compositions. Students will gain an understanding of how compositional arrangements can manipulate a visual interpretation from a viewer and how the composition can create a specific mood or feeling. Students will also develop an understating of how typographic imagery can also create a specific aesthetic and mood.

#### Semester 2

#### Cinematography and Lighting (FPD121) (3 credits)

This course builds on the knowledge and skills developed in Production I. Through project based assignments students can explore their creativity and apply visual communications skills. There will be an emphasis on capturing a moving image effectively and artistically through choice of lenses, lighting and grip equipment.

#### Screenwriting II (FPD122) (3 credits)

Students will build on what they learned in Screenwriting I - develop dialogue skills, understand character development and work on scripts for their short film projects.

#### Production II (FPD125) (4 credits)

This course will build on knowledge gained in Production I as students will look in more depth at all aspects of the camera functions, lens use, grip equipment, and lighting. Location shooting, Production Design, professional set etiquette, safety and equipment terminology will all be covered.

#### Short Film I (FPD126) (5 credits)

Students will consult with a teacher mentor, pitch ideas and work with groups to complete a short film

project. Students will be encouraged to direct or produce a project and crew on another project.

#### Television Development I (FPD128) (3 credits)

Students will explore current trends in episodic programming and production. This workshop style class will walk students through the process of developing their own television property (factual or narrative) and the creation of an industry style pitch package for their project.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 3

#### Directing Workshop (FPD233) (2 credits)

Working with actors, the students will learn about the casting process, rehearsals, blocking, working with non-actors and effective techniques for communicating with actors. Also, students will cover the director's preparation processand effective communication skills for working with crew.

#### Short Fillm II (FPD235) (5 credits)

A more ambitious continuation of Short Film I where students will tackle more sophisticated productions.

#### Advanced Post Production (FPD236) (4 credits)

This course builds on the skills required for effective storytelling in post-production through picture editing and sound mixing using industry standard software. Students will learn about editing theory, organizational skills as well as cutting and multi-track mixing techniques. Topics will include: trouble shooting for problem projects, effective use of music, colour correction, titling and basic visual effects.

#### Television Production II (FPD238) (3 credits)

Building on skills acquired in Factual Pilot I and the projects that the students began to develop, they will prep and shoot some of their television properties. This course will also cover: writing as a team, shooting an episodic project, 3 camera shoots and commercial production.

#### Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 4

#### Short Film III (FPD240) (6 credits)

Final film preparation and execution with consultation from a teacher mentor.

#### Producing, Freelancing and the Business of the Film Industry (FPD242) (2 credits)

Students will learn about higher level industry concepts including the studio system, tax credit system, film festivals, networking, making independent films and breaking into the industry. They will also gain an overview of all aspects of the film industry from financing to distribution. Students will learn everything from contract basics to how New Media plays a role in the current industry.

#### Specialized Workshop (FPD243) (2 credits)

The course will include industry guest speakers, specialized workshops (i.e. Continuity Supervision, Storyboard Artistry, Intro to Visual Effects), preparation for a Year End Screening as well as collaboration with the Shadows of the Mind film festival and local industry.

#### Industry Work Placement Session (FPD244) (4 credits)

Students will work with various organizations and charities in the community to produce PSAs, educational and instructional videos. They will gain valuable experience working with a `client` contributing immensely to the local community.

#### Television Development III (FPD248) (3 credits)

In groups, students will shoot and complete a television pilot based on the projects that they developed in Factual Pilot I and II.

# Game - Art

Ontario College Diploma (2 Years - 4 Semesters ) (4008) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

This 2 year program structure provides a balanced schedule strongly emphasizing art creations and production. Initial semesters pay special attention to traditional arts, in recognition of traditional art skills as a foundation for digital art skills. Each semester has at least one class outside art production, covering other areas crucial to a game artists development. By the final semester, studio style digital art production is heavily emphasized in preparation for the students entering the workforce. Students may have the opportunity to be involved in applied research projects. Please see the `Applied Research Centre` section for more information relating to the Sault College Applied Research Centre.

#### **PROGRAM OUTCOMES**

#### The graduate has reliably demonstrated the ability to:

- 1. Identify the differences in game genres in order to developed games that meet the needs of specific markets.
- 2. Situate emerging trends within a historical context of games and interactive media to adapt relevant concepts, vocabulary and frames of reference.
- 3. Identify and related concepts from a range of industry roles, including programming, design and art to support the development of games.
- 4. Contribute as an individual and a member of a game development team to the effective completion of a game development project.
- 5. Develop strategies for ongoing personal and professional development to enhance work performance in the games industry.
- 6. Perform all work in compliance with relevant statutes, regulations, legislation, industry standards and codes of ethics.
- 7. Support the development of pre-production and conceptual art for games and gaming through the selection and application of relevant design tools and application of relevant design tools and drawing techniques.
- 8. Create original game assets to meet requirements outlined in game design documents and/or creative briefs.
- 9. Contribute to world building and level design in a game engine to meet industry and marketplace requirements.
- 10. Assess and iterate user interface design in alignment with Game Design Documents to optimize both the aesthetics and function of gameplay.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 College English (C) ENG4C, or mature student status.

# **CAREER PATHS**

Graduates from the Video Game Art program at Sault College can work as Environment Artists/World

Builders, Level Designers, Concept Artists, Texture Artists, 3D Modellers, and User Interface Artists.

#### Potential Employers include:

- Game Studios
- Broadcast Television Stations
- Engineering/Architecture Firms
- Self-Employed
- Graphic Design Studios

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,317.00	\$15,180.80	\$1,777.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

For more information contact Program Coordinator Frank Salituri at 705.759.2554 ext 2793 or email <u>frank.salituri@saultcollege.ca.</u>

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I VGA101-3 Life Drawing 1 VGA102-3 Drawing/Illustration VGA103-3 Game Design Process VGA104-6 Game Art Studio 1 VGA105-3 History of Video Games

#### **SEMESTER 2**

VGA200-3 Concept Art for Gaming 1 VGA201-3 Life Drawing 2 VGA202-4 Prototyping 1 VGA203-6 Game Art Studio 2 GEN100-3 Global Citizenship

#### **SEMESTER 3**

VGA300-2 Industry Study VGA301-3 Concept Art for Gaming 2 VGA302-5 Prototyping 2 VGA303-4 Texturing and Shaders VGA304-6 Game Art Studio 3

#### Select one of the following:

GEN110: Student Selected General Education

### **SEMESTER 4**

VGA400-3 Concept Art for Gaming 3 VGA402-3 Critical Game Analysis VGA403-4 Interface Design VGA404-6 Game Art Studio 4 VGA405-4 Portfolio Development

# **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Life Drawing 1 (VGA101) (3 credits)

Through studying the human figure using traditional media, the student will gain a more complete understanding of human anatomy, composition, weight distribution, potential energy, form, and texture. The student will focus on creating the sense of form through understanding light and shadow.

#### Drawing/Illustration (VGA102) (3 credits)

In this course the student will learn to create environmental renderings using traditional media. Students will also experiment with different traditional styles and techniques, and gain a thorough understanding of perspective.

#### Game Design Process (VGA103) (3 credits)

What is in a game? What are the component parts? Why are games played? Why are they fun? How are games made? In this course the student will be challenged with discovering answers to these questions. Students in this course will also learn about the game development process, and get hands on experience producing and presenting game pitches, concepts and storyboards.

#### Game Art Studio 1 (VGA104) (6 credits)

Concentrating on using digital imaging and 3D software, the student will be introduced to creating 2D and 3D assets with an emphasis on learning the basics and fundamentals of video game art creation.

#### History of Video Games (VGA105) (3 credits)

Through this course, the student will achieve a greater understanding of how key limitations drove the art direction of the time. Students will learn about key milestones in the history of video games ranging from the origins to the current generation.

#### Semester 2

#### Concept Art for Gaming 1 (VGA200) (3 credits)

This course will explore the world of concept art with regards to gaming. The student will practice and explore the creation of 2D game art using both traditional and digital mediums. An emphasis of this course

will have students learning how to properly research and reference their concepts.

#### Life Drawing 2 (VGA201) (3 credits)

A continuation of Life Drawing 1, this course will provide the student with more practice in capturing light and shadow as it relates to the human form. Exercises in capturing potential movement in character/life drawing will be explored. Students will be faced with the challenge of creating final compositions of characters in action sequences using the sketches developed during the life drawing sessions.

#### Prototyping 1 (VGA202) (4 credits)

Developing a game prototype is the most effective way of communicating your game ideas before full development. This course will focus on creating art for game prototypes using an industry standard prototyping process. Students will also gain familiarity designing game mechanics and game systems using paper-based, and other non-digital forms of media.

#### Game Art Studio 2 (VGA203) (6 credits)

This course is a continuation of Game Art Studio 1. The aim is to develop efficient 2D and 3D assets for games. Students will also learn proper workflow techniques while creating game assets.

#### **Global Citizenship** (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

#### Semester 3

#### Industry Study (VGA300) (2 credits)

In Industry Study, the student will gain awareness of the game art industry. How do studios work? What is a typical work environment like? What would my job responsibilities most likely include? What will be expected of me as a game artist? How do I prepare myself for a job? Interview skills, application processes and portfolio development will be major components of these sessions.

#### Concept Art for Gaming 2 (VGA301) (3 credits)

In this extension of Concept Art for Gaming 1, the student will be faced with creating more sophisticated concept art. The student will employ both traditional art/illustration skills and digital art skills. The focus of the course is to create polished, high quality concept art.

#### Prototyping 2 (VGA302) (5 credits)

Expanding on concepts learned in Prototyping 1, students using industry standard game development tools will design, produce, and prototype functional game mechanics and game graphics. Students will also gain practical experience integrating game art assets into game development tools efficiently.

#### Texturing and Shaders (VGA303) (4 credits)

Textures and shaders give life to the art in the game. Students will learn how to create efficient textures and shaders for game assets. Students will also learn both normal and parallax mapping techniques.

#### Game Art Studio 3 (VGA304) (6 credits)

In this advanced session of Game Art Studio, participants will be faced with the challenges of learning high poly sculpting, re-topology and creating optimized game assets. Another emphasis of the course will be learning advanced workflows for Next-Gen game art pipelines.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 4

#### Concept Art for Gaming 3 (VGA400) (3 credits)

This course is an extension of Concept Art for Gaming 2 and will focus on creating and presenting high quality concept art. Analyzing research and reference materials will help the students achieve a greater level of detail in their final concepts.

#### Critical Game Analysis (VGA402) (3 credits)

In order to analyze games, they must be played. In this course games will be played, examined, evaluated, dissected, and improved. The student will be challenged with evaluating, redesigning and artistically improving elements of games played.

#### Interface Design (VGA403) (4 credits)

In Interface Design, students will learn about the skills required and artistic expectations of this subset of the video game art profession. The course will look at both designing user interactions and the practical artistic skills required to produce game interface graphics. Students will also gain practical knowledge in designing user interface art for a variety of game platforms.

# Game Art Studio 4 (VGA404) (6 credits)

In this final course of the Game Art Studio series, students will draw upon all skills acquired in the program to date to develop final projects and portfolios.

# Portfolio Development (VGA405) (4 credits)

The focus of this course is for students to create a variety of portfolio quality game art assets. Students will work and experience real world video game art development studio atmospheres and scenarios while they work on their portfolios. Fundamental topics will include managing deadlines and time crunches, understanding how to polish and render finished game art assets, learning how to layout and present game art, and emphasizing key pipeline techniques to optimize workflows and work efficiently.

# Graphic Design - Digital Media

Section B.124 6/2/2020

Ontario College Advanced Diploma (2 years ) (1094) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

In a fast-paced digital world, Graphic Design is more in-demand in the workplace than ever before. Sault College's new accelerated advanced diploma program in Graphic Design will allow you to complete a 3-year program in only 2-years, getting you trained and ready for employment faster than ever.

The building blocks of great design come from creative minds, and fostering unique design solutions is key for creating work that stands above the crowd. This program helps students do so by focussing on the core courses in design and then expanding on those key elements to more advanced study.

This **accelerated** program will give you the tools you need to create visually stunning work that incorporates solutions for the ever growing digital age.Emphasis is placed on project-based learning, giving you a strong foundation in the exhilarating design process. Incorporating an array of both technology and media, you will receive your training alongside experienced and supportive professors and industry consultants who will help you develop a professional and industry relevant portfolio that will get you noticed.

In this way, we are able to train talented designers who are ready for the work force in only two years.

# We can offer you:

- A learning experience in small studio classes under the watchful eye of professional designers.
- A culture that fosters creative ability and pushes to explore unique and creative ways to solve design problems.
- Studios with hardware and software that is current and relevant in the design field.
- A generous student to faculty ratio, and faculty who care about your learning experience.
- Projects that are designed to be hands-on and a reflection of a body of work typical of today's graphic design industry.
- An automatic student membership to RGD (Registered Graphic Designers of Ontario) allowing you opportunities through Free admission to our local Design Algoma meetings, and webinars hosted by industry professionals.
- A sparkling student satisfaction rate of 100% on Knowledge and Skills, Quality Learning Experience and Graduate Satisfaction as well as 100% satisfaction rate from employers. (KPI results)

# Our Faculty care about your success.

Students are asked to rate the concern of people at the College for their success. Student rate our program at 90% compared to the system average of only 66%. (KPI results).

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

# **PROGRAM OUTCOMES**

# A graduate of the Graphic Design - Digital MediaProgram at Sault College will reliably demonstrate the ability to:

- 1. Conceptualize and develop design solutions using principles of design to create visual communications that meet the needs of the project.
- 2. Employ the design process to create design solutions that meet the project objectives and the needs of the client and/or user.
- 3. Plan, create and use photography, illustration and typography in design layouts to meet the requirements of the creative brief.
- 4. Design, develop and create a variety of media products using relevant, current and/or emerging technologies.
- 5. Communicate ideas, design concepts and opinions clearly and persuasively to others.
- 6. Use recognized industry practices throughout the design process and related business tasks.
- 7. Plan, implement and evaluate graphic design projects using project management skills to deliver quality work to clients according to schedule and within budget.
- 8. Complete all work in a professional and ethical manner and in accordance with all applicable legislation and regulations.
- 9. Keep current with visual media design trends, technologies and industry practices using strategies that enhance work performance and guide professional development.
- 10. Assess, select and use a variety of digital media technologies when developing design solutions.

# Reference

Ministry of Training, Colleges and Universities Graphic Design Program Standards (MTCU 61820), September 2014.

# **ADMISSIONS**

# MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma (or equivalent) with Grade 12 English (C) ENG4C, or mature student status.

# **CAREER PATHS**

Graduates may work as graphic designers, computer graphic illustrators and designers, layout artists, typographic designers, advertising illustrators, book illustrators, art directors, teachers, webs site designers, production artists, corporate designers, package designers, print production managers, cartoonists, television production team members, set designers, and in many other areas.

# MANDATORY FEES

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$4,074.80	\$1,317.00	\$15,180.80	\$1,777.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I GRD101-3 Drawing for Communication GRD102-6 Design 1 (Design Principles) GRD103-6 Typography 1 GRD104-3 Digital Production 1 GRD105-3 Professional Practices 1 (Design Research) **Note:** Semester 1 is 15 weeks.

#### **SEMESTER 2**

GRD201-3 Digital Photo Manipulation GRD202-6 Design 2 (Design Strategies) GRD203-6 Typography 2 GRD204-3 Digital Production 2 GEN100-3 Global Citizenship GRD205-3 Design History **Note:** Semester 2 is 21 weeks.

# **SEMESTER 3**

GRD301-3 Web Design GRD302-8 Design: Senior 1 GRD303-6 Typography for Digital Media 1 GRD304-3 Digital Production 3 GRD305-3 Motion Graphics

#### Select one of the following:

GEN110: Student Selected General Education Note:

Semester 3 is 15 weeks.

\*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 4**

GRD401-3 Web Design 2 GRD402-8 Design: Senior 2 GRD403-6 Typography for Digital Media 2 GRD404-3 Digital Production 4 GRD405-3 Motion Graphics 2 GRD406-8 Capstone Design Project GRD407-2 Graduate Exhibit **Note:** Semester 4 is 21 weeks.

# **Course Descriptions**

# Semester 1

Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

# Drawing for Communication (GRD101) (3 credits)

In a visual communications industry drawing is one of the main forms of communication that design professionals employ. In this course the basics of drawing, point,line, form, will be covered in practical exercises that allow the participant to gain a solid foundation in visual communication. Drawing principles studied will include planning drawings, perspective drawings, use of shading and textures. Practical exercises will be applied to traditional media based projects as well as digital applications.

# Design 1 (Design Principles) (GRD102) (6 credits)

This course will be delivered in a digital format using current Adobe Creative Suite software as working tools. In this foundation course the basics of design, design process, composition and visual language will be practiced. Participants will be challenged to formulate design plans and implement project planning and time management skills in developing coursework. Participants will be challenged with practicing the basics of design and design process in both print and web based applications.

# Typography 1 (GRD103) (6 credits)

In this foundation level typography course the participant will be challenged with demonstrating their acquired understanding of typographic concepts as they pertain to web based design problems as well as print based Design problems. Knowing how people read, accept information and understand ideas is a cornerstone to any professional design career. Participants should expect to be able to utilize basic digital and print based typographic concepts and methods tin their daily creative work by the end of this course.

# Digital Production 1 (GRD104) (3 credits)

This course will focus on the use of software currently used in the creative industry. The Adobe Creative suite of computer applications in a Macintosh environment will be the main subject matter studied in this course. Participants will be using Creative software to solve design problems and challenge their digital skills.

# Professional Practices 1 (Design Research) (GRD105) (3 credits)

A sound understanding and practical applications of design research, information gathering techniques and documentation of both formative and summative data will be the end goal of this course. Students will be coached and will practice methods to gain insights into strategies that will help them as professional designers provide more what the client needs as opposed to what they think they want. With a good foundation in using research to approach and understand any design problem the participant may face in their future careers the professional designer will be able to provide better and more competitive services to their clients in any visual communications problem encountered.

# Semester 2

# Digital Photo Manipulation (GRD201) (3 credits)

This is a foundation level course that will provide the participant with a solid understanding of basic photographic techniques as well as the ability to understand a photographic language to better art direct photographers in their future careers. Images gathered will also be manipulated using photographic editing software to provide participants with a base level skill set to expand upon in future coursework and

challenges. Developing and manipulating images for use in both web based and print based applications will be studied.

# Design 2 (Design Strategies) (GRD202) (6 credits)

How professionals approach design problems requires planning and strategy in order to deliver top quality services to any client. Design skills will be further enhanced in this continuation from Design 1. Basic design skills will be expanded upon and applied to a variety of real life digital communications challenges. Participants will be challenged with creating solutions to digital visual communication problems in a guided and coached environment. Design challenges involving web sites, apps and print based solutions will be explored.

# Typography 2 (GRD203) (6 credits)

A continuation of Typography 1, this course will provide the participant with the opportunity to practice already learned skills and build upon then to develop sophisticated digital typographic solutions for visual problems. The basics of typographic study will be reinforced and expanded on to allow the participant to develop organized and creative typographic solutions. A focus on using type in editorial design applications will be central to this course. Editorial design application will include traditional media such as magazines, ebooks, accessible PDF documents. Concepts in accessibility centering around AODA( Accessibility for Ontarians with Disabilities Act) and typography will be introduced to be expanded upon in future courses.

# Digital Production 2 (GRD204) (3 credits)

This course is a continuation of Digital Production 1. This is a foundation course in the basics of electronic creativity. The importance of? computer terminology will be stressed. Students will learn to manipulate equipment and software, manage files, scan images, and create graphics and text layouts using the Adobe Creative Suite package which includes Illustrator, Photoshop and InDesign, and mobile/Web development software. Advanced techniques in image manipulation, page building, image creation, will be practiced.?

# Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Design History (GRD205) (3 credits)

A solid background and understanding of historical design trends will provide the future Graphic Designer information and an understanding that will help develop creative approaches to future design challenges. A study of major recent design movements will be studied in this active and interactive course.

# Semester 3

# Web Design (GRD301) (3 credits)

The idea of delivering information to an audience digitally over wireless networks is a relatively new technology. User interface and user experience design will be a cornerstone to the content in this course. IN this course the participant will be able to compare and contrast web based and print based communications techniques, methods and concepts. Emphasis will be on mastering the development of effective web pages and online apps that are geared to deliver specific information to a specific audience.

# Design: Senior 1 (GRD302) (8 credits)

Senior level students in design will be challenged with developing visual materials to solve design problems found in real life scenarios. Participants will be encouraged to use design for social good and explore how good design can build good communities. Case studies of existing Design projects will be used as examples to allow participants the ability to develop their own design projects with real purpose and meaning. This is a students directed course facilitated by a professional designer and will replicate a real life design studio as much as possible.

# Typography for Digital Media 1 (GRD303) (6 credits)

This course will allow the senior student to become more expert in using typography in a digital environment. Participants will become well versed in the specific nuances involved in using typographic content in a digital environment as opposed to print. Concepts in web based typography and kinetic typography will be practiced.

# Digital Production 3 (GRD304) (3 credits)

HTML, CSS, and Javascript are fundamental programming languages used in web production. In addition to basic coding web designers and production artists must have a sound working knowledge of image and type manipulation in order for web pages to load efficiently and be readable across a variety of browsers. This course will center on expanding the students knowledge of code- the language of the web- to allow the participant to be a productive member of any web development team and employ best practices in code development.

# Motion Graphics (GRD305) (3 credits)

Making images and typography move has been the domain of animators for many decades. Graphic designers, especially those employed in the broadcast design industry or developing moving graphics for web based solutions will benefit from this course. This studio course introduces the student to the world of moving graphics. Through experimentation and exploration students will study legibility and readability issues with typography and how movement impacts both type, imagery and understanding and interpretation. A variety of methods will be used to manipulate text and imagery in a moving environment. Expertise in the concepts involved in presenting image based to typographic based solutions in an environment that moves will be crucial in the future careers of graphic designers.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Semester 4

# Web Design 2 (GRD401) (3 credits)

This course will provide an experience for the senior level design students to be a fully functioning front end web designer. The course will center around the development of websites and development of content and coding for projects undertaken. If possible pro-bono projects for not for profit organizations focused in community based issues will be undertaken by the participant. The course will be facilitated by an experienced faculty who will guide and art direct the participant through the projects to complete the competencies required by the course.

# Design: Senior 2 (GRD402) (8 credits)

In this final semester course the participant will be challenged with developing design projects that enhance the public good. Wherever possible participants will work with not for profit clients to solve

community based design problems. Senior level students in design will be challenged with developing visual materials to solve design problems found in real life scenarios. Participants will be encouraged to use design for social good and explore how the community can benefit from the use of good design. Design advocacy and professionalism will be a main focus of this final semester course. This is a student directed course facilitated by a professional designer and will replicate a real life design studio as much as possible.

# Typography for Digital Media 2 (GRD403) (6 credits)

This course will provide students time and education, to further develop an expertise in typographic design; especially concerning digital typographic applications and media. This course will focus on portfolio quality projects and allow students to fine tune their typographic skills before entering into the professional world of Design.

# Digital Production 4 (GRD404) (3 credits)

The course will expand on electronic production techniques, printing methods, electronic production issues surrounding web applications and broadcasting graphics. Particular focus will be paid to estimating time on projects and tracking time to develop strategies in time and project management. It is intended that this course will inform the student of the remainder of the basic information that they need to be competent production artists within the graphics industry.

# Motion Graphics 2 (GRD405) (3 credits)

This course will build upon skills learned using a variety of industry standard software applications. Students will be required to identify the distinct advantages of both vector and raster based graphic formats pertaining specifically to animation. Students will also develop more advanced skills pertaining to animation for the web, and animation for broadcast production using industry standard methods of producing animation.

# Capstone Design Project (GRD406) (8 credits)

In this course, students will be challenged to propose, develop and present a final portfolio quality design project that highlights the participants own field of design specialty. It is intended that the results of this course will provide the students with an exceptionally high quality portfolio piece to help launch their careers in design.

# Graduate Exhibit (GRD407) (2 credits)

This is a course that will create a buzz in the local community about the talents and skill sets of participants in this program. Self Promotion is a key skill to any creative professional working towards building a career in todays marketplace. In this course the participants will be guide through a decision making process to promote themselves in the form of portfolio, social media, print, and online as well as work as a group to create an opportunity to launch their careers in the format of a group year end show open to industry members and the local community. The concepts of working within time frames, project planning and budgeting will be core to the delivery of this course.

# Esthetician

Ontario College Diploma (3 Semesters, 45 weeks) (2017) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Follow us on Instagram #saultcollegeesthetician

The Sault College Esthetician Diploma Program will prepare you for an exciting career in just one year.

Learn how to perform the full range of esthetic treatments available in salons and spas today. Be trained in our fully equipped esthetic lab and student - run community spa where you will gain valuable hands on work experience under the supervision of trained and knowledgeable faculty. Graduates can expect careers in salons and spas offering highly sought after treatments, health and wellness centres, resorts and cruise ships, freelance makeup careers, cosmetic sales, product representatives / consultants for distribution companies, editorial work, and esthetic training and education.

#### New to the Program:

- Introduction to Microblading
- Eyelash Extensions
- Lash Lifts
- Dermedics BB Glow Skin Treatments
- Spray Tanning
- Acrogel/Powder Perfection/Chrome Effects Nail Techniques
- Sugaring Hair Removal

In addition to the exciting new curriculum coming to The Esthetician Program, students will be prepared for a successful career because we deliver the most comprehensive curriculum which includes:

- Brow Perfection and Enhancements
- Make-up Artistry and Theatre Makeup
- Full Body Hair Removal
- Acne Treatments
- Anti Aging/Hydrating Treatments
- Microdermabrasion Facial and Body Treatments
- Chemical Peels
- Facial, Neck and Decollette Massage and Hot Stone Techniques
- Manicure
- Pedicure
- Shellac Applications
- Full Body Massage and Hot Stone Techniques
- Full Body Treatments Exfoliation, Mud Wraps
- Men's Spa Treatments

# Facilities:

# **Teaching Lab**

Learn in our fully equipped esthetic lab where students will develop and master their professional esthetic skills with a full range of esthetic treatments.

# The Spa At Sault College

# https://www.saultcollege.ca/theSpa/

Our student-run community/campus spa facility at Sault College provides students with the opportunity to develop and master all professional esthetic techniques while providing treatments for the general public as well as our own College community. Placement at The Spa at Sault College prepares students for success in this competitive industry. Students will be responsible for marketing and promotions, personal and retail sales of products and services, reception and customer service, booking and confirming appointments, and team building strategies.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for **second career** funding for this program! To learn more about your options and how to get started, contact us at studentrecruitment@saultcollege.ca.

# **PROGRAM OUTCOMES**

# A graduate of the Esthetician Program at Sault College will reliably demonstrate the ability to:

- 1. perform a variety of specialized body and skin care treatments following correct procedures and precautions and supporting client needs (including and not limited to facials, manicures, pedicures, hair removal, and make up applications).
- 2. use a range of specialized equipment and products, in compliance with established national, provincial, industry, and other related standards, regulations, policies, and procedures.
- 3. apply relevant knowledge of anatomy, physiology, and histology to the provision of specialized esthetic treatments and services.
- 4. adhere to health, safety, sanitation, and infection and prevention control guidelines, according to current legislation and national, provincial, municipal, and industry standards and regulations.
- 5. identify business skills and activities required for the successful establishment and operation of a small esthetic business in a salon or spa environment.
- 6. select and recommend the use of esthetic products and product ingredients to clients, taking into account health status and identified needs.
- 7. establish and maintain professional relationships in adherence to standards and ethics associated with the profession.
- 8. develop customer service strategies that meet and adapt to individual needs and expectations in accordance with professional standards and ethics.
- 9. determine professional development strategies that lead to the enhancement of work performance and career opportunities and keep pace with industry change.

# **Reference**

Ministry of Training, Colleges and Universities Esthetician Program Standards (MTCU 53401) (March 2007)

# **ADMISSIONS**

# MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma, including grade 12 English ENG4C or mature student status.

# **CAREER PATHS**

Graduates of the Esthetician Program can expect to find employment in the following areas:

- Spas, day resorts, salons and health centres employed as estheticians, makeup artists, manicurists, pedicurists, nail technicians or in supervisory positions.
- Cosmetic sales, purchasing and marketing, or other positions in the retail sector
- Self-employment/contract and consulting work
- Demonstrations, teaching or instructing

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$5,427.45	\$1,548.00	\$22,396.20	\$2,008.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **CLINICAL/LAB OR FIELD PLACEMENTS**

Completed medical forms

# **OTHER INFORMATION**

For more information contact Program Coordinator Silvana Bassanello at 705.759.2554, ext 2818 or email silvana.bassanello@saultcollege.ca.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM126-3 Workplace Communication EST115-3 Intro to Spa/Practicum EST116-4 Hair Removal EST117-7 Professional Nail Techniques EST118-6 Fundamentals of Skin Care - Practical I EST119-4 Fundamentals of Skin Care Theory 1 EST134-4 Makeup Artistry

#### SEMESTER 2

EST166-7 Student Esthetician Clinic EST167-4 Advanced Skin Care Theory II EST168-6 Advanced Skin Care Practical II EST169-4 Makeup Artistry and Advanced Trends

# Select one of the following:

#### GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **SEMESTER 3**

EST135-3 Anatomy and Physiology EST208-9 Practicum EST210-7 Advanced Spa Techniques and Body Therapies GEN100-3 Global Citizenship EST209-3 The Spa Business and Entrepreneurship

# **Course Descriptions**

#### Semester 1

# Workplace Communication (CMM126) (3 credits)

This course develops skills in reading, writing, listening and speaking that are typically required in the modern workplace. Work-related journals and periodicals will be used to develop communication skills pertinent to the students` programs of study. The principles of writing will be taught through the writing process and students will practice writing paragraphs, letters, memos and reports. To improve their work, students will be encouraged to use all forms of technology. Listening and oral presentation skills will be enhanced by classroom activities/experiences. Also, students will prepare a resume and cover letter to assist them in their job search.

# Intro to Spa/Practicum (EST115) (3 credits)

This course will introduce students to the Spa at Sault College as a placement experience. Students will gain knowledge and develop practical skills with infection control practices as directed by the Algoma Public Health. Students will also have the opportunity to provide esthetic services for the clients of the Spa, and develop client care and retail and marketing strategies. Students will also be introduced to ethical standards of the esthetic industry and the various roles and responsibilities in operating a successful Spa business. Students will be required to meet the expectations as outlined in the Spa at Sault College Policies and Procedures in regards to professional image and professionalism.

# Hair Removal (EST116) (4 credits)

This course will provide students with theoretical knowledge of the structure of the hair, stages of hair growth, disorders and related conditions. Students will develop skills in conducting client consultations and will develop the practical skills required to perform a variety of safe and effective hair removal services on the face and body with the use of hard and soft waxes. Emphasis will be placed on speed and accuracy and the practice of safety, sanitation and disinfection or work station and implements as instructed by The Algoma Public Health. Students will be introduced to the Spa at Sault College where emphasis will be placed on customer service, retailing of products and services and the overall development of practical skills.

# Professional Nail Techniques (EST117) (7 credits)

This course will provide students with theoretical knowledge of the structure of the nails, development and growth of the nails and nail disorders and diseases. Students will develop skills in conducting client consultations and will develop the practical skills required to perform manicure and pedicure procedures, and polish applications. Emphasis will be on the practice of safety, sanitation and disinfection of workstations and implements as instructed by the Algoma Public Health. Students will be introduced to the Spa at Sault College where emphasis will be on customer service, retailing of products and services and the

overall development of practical skills.

# Fundamentals of Skin Care - Practical I (EST118) (6 credits)

This course will introduce students to customized skin treatments including acne treatments as anti aging treatments.. Phases of a facial procedure and practical instruction will include: The Cleansing Technique, skin analysis and facial record, exfoliation techniques, extractions, face neck and decolette massage, masking procedures and the application of treatment creams. Practical instruction also includes the application of

specialized esthetic equipment and the benefits of use. Theoretical knowledge of the physiology of the skin, skin types and skin conditions, as well as, classifications of skincare products are essential for client

consultation, skin analysis, and product selection. Students are introduced to the NatureMed

Professional product line, as well as, a wide variety of cleansers, tonic lotions, exfoliants, masks

and treatment creams. Client consultation and record keeping is emphasized.

# Fundamentals of Skin Care Theory 1 (EST119) (4 credits)

This course will provide a comprehensive understanding of the anatomical structure and

composition of the skin. Emphasis will be on analyzing the skin (as well as ethnic and men's

skin) to determine skin types, and common skin conditions as well as internal and external

factors which affect the skin. Precautions and contraindications to skin treatments will be

discussed. Students will develop client consultation skills and will learn how to analyze

information on a health history screen. Instruction on ingredient technology will focus on the

benefits and contraindications to ingredients relevant to specific skin types and conditions and

product formulations.

# Makeup Artistry (EST134) (4 credits)

This course teaches fundamental makeup application techniques. All aspects of colour theory, corrective techniques, highlighting and contouring and concealing are explored for all age ranges from teen to mature clients. Great emphasis is placed on brow grooming and shaping. Client consultation skills will be developed. Sanitation and disinfection of all tools, and supplies will be discussed and practiced in order to ensure the health and safety of yourself and others.

#### Semester 2

# Student Esthetician Clinic (EST166) (7 credits)

Student placement in the Spa at Sault College will provide students the opportunity to

strengthen esthetic skills by performing a variety of services including manicures, pedicures,

skin treatments including advanced microdermabrasion treatments, hair removal treatments

and makeup applications for the general public. Day to day operations of a Spa setting will be

emphasized and students will be responsible for answering phones, scheduling appointments,

confirming appointments, retailing and handling all transactions. Professional image is

emphasized in all aspects of personal appearance, effective verbal and non verbal

communication, professionalism, and sanitation and disinfection practices.

#### Advanced Skin Care Theory II (EST167) (4 credits)

This course is designed to provide students with more in depth knowledge of skin conditions

relating to acne, and premature aging. Emphasis is placed on analyzing the conditions

prevalent with aging, acneic and sensitive skin. A study of new condition specific treatment concepts including chemical exfoliations, microdermabrasion, and BB Glow will be emphasized. Focus on instruction will also include the annual Esthetician Expo and Information Fair presented to the Sault College Community

#### Advanced Skin Care Practical II (EST168) (6 credits)

This course builds upon the knowledge and esthetic skills developed in first semester.

Acne treatments and anti aging treatments will be reviewed and advanced skin procedures

including microdermabrasion, chemical exfoliation treatments, and BB Glow treatments will be

introduced. Focus of instruction will be on condition specific treatments and basic medical esthetic applications. Professional image and excellence in client care will be emphasized.

# Makeup Artistry and Advanced Trends (EST169) (4 credits)

This course builds upon the knowledge and the makeup artistry skills acquired in EST 120 with emphasis of instruction on mature applications. Theatre makeup techniques will be explored through Program participation with a local theatre production. Focus of instruction will be on brow and lash enhancements including an introduction to microblading, classic lash extensions and lash lifts.

#### Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

#### Semester 3

# Anatomy and Physiology (EST135) (3 credits)

A general understanding of anatomy and physiology will enable the student to provide a more informed professional service. Knowledge of the structure and functions of bones, muscles, nerves and circulation will give the student more confidence in performing manipulations on various parts of the face, hands and feet.

#### Practicum (EST208) (9 credits)

Our campus spa provides students with the opportunity to advance their skills in the esthetic practice. Students will gain independence with the ability to provide a wide range of basic and advanced spa treatments. The spa business and customer service strategies will also be emphasized.

# Advanced Spa Techniques and Body Therapies (EST210) (7 credits)

This comprehensive course brings together all of the knowledge and skills acquired from Semester I and II. This course will take students through professional client consultation and needs analysis to the provision of a total spa experience with non-therapeutic relaxation body massage, relaxation hot stone massage and a variety of body wraps and hydrotherapy treatments . Students will also be introduced to the application of acrygel, body spray tanning, LED advanced acne treatments

# **Global Citizenship** (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# The Spa Business and Entrepreneurship (EST209) (3 credits)

This course is designed to provide students with an understanding of spa business entrepreneurship and to provide an opportunity to develop personal ownership skills and an effective business plan. In the process, students will gain an understanding of the social, cultural and economic relationships between the esthetic industry and markets, local to global.

# Hairstyling

Ontario College Diploma (3 semesters, 45 weeks) (1054) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# Section B.126 6/2/2020

# **PROGRAM OVERVIEW**

Graduates from the Hairstyling Program will have attained a solid basis in the theory, principles and practices needed to enter this personal service profession.

The graduate will be able to apply their skills to support their trade to include the ability to accept, respect and service a diverse cultural people, successful salon operation, enhance work performance and further their career opportunities, while keeping pace with the changing industry trends. In their work, hairstylists will meet and adapt to client needs and expectations in the provision of haircutting, and styling services. They will be competent in the use of specialized tools and products to provide chemical texture, permanent waving and colour and lightening services as well as work with hair additions. Key requirements of a successful graduate will be to have the ability to communicate verbally, electronically and in written form.

Employment opportunities include working in local salons, within larger organization and agencies that require a stylists knowledge and expertise or in the field of education.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for second career funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

# **PROGRAM OUTCOMES**

# A graduate of the Hairstyling Program at Sault College will reliably demonstrate the ability to:

- 1. Complete all work in adherence to professional ethics, government regulations, workplace standards and policies and according to manufacturers specifications as applicable.
- 2. Facilitate the provisions of a healthy and safe working environment and perform sanitation procedures in accordance with related health regulations and legislation.
- 3. Apply entrepreneurial skills to the operation and administration of a hair stylist business.
- 4. Adapt to various and changing technologies, applications and procedures in the hair styling industry and develops a plan outlining future professional development.
- 5. Develop and use client service strategies that meet and adapt to individual client needs and expectations.
- 6. Select and administer preparatory procedures and or treatments to the hair and scalp using individually selected products to meet the expectations of the client.
- 7. Identify, select and use a variety of tools to cut hair according to the needs and expectations of the client.
- 8. Select and use standard and specialized techniques to effectively style wet and dry hair.
- 9. Perform a permanent wave using current and relevant methods according to hair type and style.
- 10. Chemically relax hair by selecting and applying relevant knowledge of, and skills with, chemical products and techniques in order to meet the needs and expectations of the client.
- 11. Colour, lighten, tone, highlight and lowlight hair, and/or remove pigment to the level of colour desired.

12. Compare and contrast fibre types, perform application and removal procedures, use specialized tools and procedures to maintain hair addition.

#### <u>Reference</u>

Ministry of Training, Colleges and Universities Hairstyling Program Standards?(MTCU 53400), June 2012.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with grade 12 English (C) ENG4C, or mature student status.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$5,427.45	\$1,548.00	\$22,396.20	\$2,008.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **DRESS CODE**

Black uniform with colour, pattern and accents permitted.

# **OTHER INFORMATION**

Please Note: This is the new program number for students entering the program in September 2019. It was formerly program 1058.

For more information, contact Jordin Boniferro-Knight at 705.759.2554, ext 2471 or email Jordin.Boniferro-Knight@SaultCollege.ca.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

HSP141-2 Health and Safety HSP143-2 Client Services 1 HSP144-3 Preparatory Procedures and Treatments 1 HSP145-5 Cut Hair 1 HSP146-5 Style Hair 1 HSP147-5 Permanent Wave Hair 1 HSP148-7 Colour and Lighten Hair 1 HSP163-3 Professional Development and Ethics

# **SEMESTER 2**

HSP149-3 Entrepreneurial Skills 1 HSP150-1 Client Services 2 HSP151-2 Preparatory Procedures and Treatments 2 HSP152-5 Cut Hair 2 HSP153-5 Style Hair 2 HSP154-5 Permanent Wave Hair 2 HSP155-7 Colour and Lighten Hair 2 HSP156-2 Hair Additions 1

*Select one of the following: GEN110: Student Selected General Education* 

# **SEMESTER 3**

HSP157-1 Entrepreneurial Skills 2 HSP158-6 Cut Hair 3 HSP159-6 Style Hair 3 HSP160-7 Chemically Relax Hair HSP161-7 Colour and Lighten Hair 3 HSP162-3 Hair Additions 2 GEN100-3 Global Citizenship

# **Course Descriptions**

# Semester 1

# Health and Safety (HSP141) (2 credits)

This course will deliver the information, procedures and performances of the importance of a safe and healthy workplace. Students will acquire the knowledge and stills to comply with the Occupational Health and Safety Act (OHSA), Workplace Hazardous Material Information System and Material Safety Data Sheets. Students will identify and implement methods of sanitation, disinfection, infection control and material disposal to maintain a safe, organized and sanitary workplace.

# Client Services 1 (HSP143) (2 credits)

Students will gain an understanding of public relations; apply client service strategies while providing services to meet client needs and expectations. Theory of and recognition of anatomical features of the head in relation to services will provide students the ability to demonstrate the basis of the principles and elements of design in the services they provide to clients.

# Preparatory Procedures and Treatments 1 (HSP144) (3 credits)

This course will instruct students on the importance and procedural steps of identifying client hair and scalp needs. Recognizing disorders and diseases of the hair and scalp will enable the student to provide individually selected products and preparatory procedures to meet client needs.

# Cut Hair 1 (HSP145) (5 credits)

Hair cutting is one of the most basic and complex skills set used in salons every day. This course will provide the theoretical knowledge and skills to analyse and identify characteristics of hair, to provide a basic haircutting service to meet client needs. Students will gain the ability to select and use a variety of tools to provide cutting services for both men and women. Emphasis will be placed on the fundamentals of cutting lines, guides and degrees of elevation in relation to end results.

# Style Hair 1 (HSP146) (5 credits)

Students will demonstrate a **basic** styling service on wet and dry hair utilizing a variety of selected tools and implements. Product knowledge and chemical composition in relation to services will be identified to provide students with the tools to effectively select products that meet clients needs.

# Permanent Wave Hair 1 (HSP147) (5 credits)

The content of this course provides the student with the relevant knowledge of chemical composition of

permanent waving solutions and the effects on hair. Students will gain the ability to identify hair types and conditions providing essential information to effectively select products, tools, methods and equipment to perform a complete permanent wave service meeting client needs.

# Colour and Lighten Hair 1 (HSP148) (7 credits)

As one of the most profitable services in salons today this course will provide an introduction to the fundamental methods of application and theoretical knowledge in understanding the relationships of colours. Product knowledge and the effect that each category of colour product has on the hair will enable students to provide a basic colour service by selecting product, formulation and application method to meet client needs.

# Professional Development and Ethics (HSP163) (3 credits)

This course teaches students to adapt to various trends and technologies in the hairstyling industry. In this course students will have a professional understanding of career goals, maintaining a professional image, developing cultural awareness, daily life responsibilities, workplace standards and government regulations. This course is a program-embedded general education course for social, cultural and personal understanding.

# Semester 2

# Entrepreneurial Skills 1 (HSP149) (3 credits)

The content of this course will give the students the knowledge of daily salon operation duties and responsibilities and the importance of effective communication within the workplace. Students will practise each of these skills to build their confidence is public relations, team building and organizational skills. Retailing and display techniques for marketing will be introduced and practised to enhance students business knowledge and skills.

# Client Services 2 (HSP150) (1 credits)

This course will provide the necessary communication skills to enable students to effectively consult with clients and to communicate and develop human relation skills with clients and co-workers. Customer service strategies skills will continue to develop to enable the student to meet client individual needs and build a loyal client base.

# Preparatory Procedures and Treatments 2 (HSP151) (2 credits)

This course is a culminated learning and identification of the characteristics of hair and scalp disorders and diseases. Students will gain the skills to demonstrate the selection and application procedure of the prescribed products to address the clients needs in the treatment of hair and scalp conditions and disorders.

# Cut Hair 2 (HSP152) (5 credits)

This course provides the building of skills attained in Cut Hair 1 and focused on the students ability to demonstrate developed skills in identifying, selecting and utilizing a variety of tools, incorporating the relevant knowledge of the principles and elements of design to cut hair using elevation at varying degrees, meeting clients needs and expectations. In addition to scalp hair, students will be instructed on the tools and methods used in trimming facial hair for men.

# Style Hair 2 (HSP153) (5 credits)

This course will build the skills and knowledge of how hair responds to a variety of styling tools and methods. Students will practise and develop skills in styling wet and dry hair utilizing a variety of tools and methods of styling to meet client needs and expectations.

# Permanent Wave Hair 2 (HSP154) (5 credits)

This course is the continued building of skills and relevant knowledge of chemical composition of

permanent wave solutions and the effects on the hair. Student will gain a professional confidence and ability in their skills to select and provide a complete permanent wave service based on client consultation, hair analysis, product selection, and application methods.

# Colour and Lighten Hair 2 (HSP155) (7 credits)

This course is the continued building of skills and relevant knowledge in colour relationships and professional trade products. Students will gain proficiency in demonstrating their developed skills of identifying natural pigmentation, formulating to meet client expectations and selecting application method.?Knowledge of the application requirements and how they differ for virgin or retouch applications will be a large part of the practical aspects of this course.

# Hair Additions 1 (HSP156) (2 credits)

This course will provide the training and theory to students so that they may recognize the variety of fibres, types of pieces and application methods available on the market in artificial hair additions. Students will be instructed and practice the practical steps to analyse a clients needs through consultation, determine and select a fibre type for the selected hair addition and the method of attachment based on client needs and expectations.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Semester 3

# Entrepreneurial Skills 2 (HSP157) (1 credits)

This course will continue to build the skills in the daily operation of a salon with the study and practises of successful marketing of products and services. Students will demonstrate their ability to successfully perform financial transactions, effective customer service strategies, operational skills and marketing strategies in a virtual salon setting. Time management and organizational skills will be taught and practised providing students the experience of a well-managed environment in which to study and work. Conflict resolution techniques will be the focus in providing students with training to better understand and address client behaviours and needs.

# Cut Hair 3 (HSP158) (6 credits)

This course will provide the building of cutting skills to enable students to practise and demonstrate their ability to customize haircuts using detailing and texturizing techniques. Research and identifying ?new trends and techniques through web searching, trade magazines and social media will enable the students to ?demonstrating a higher level of design competency and understanding of cutting elevations, angles and texture techniques and the proficiencies in replication current trends.

# Style Hair 3 (HSP159) (6 credits)

This course will continue to build the students skills and proficiencies of styling hair and a more in-depth understanding of the hairs response to products and tools used in styling hair. Research through such areas as web searching, trade magazines and social media students will learn to identify new trends and techniques in styling hair? and gain the ability through practise to demonstrate the replication of new trends and designs in both ?casual and formal styles to meet industry standards.

# Chemically Relax Hair (HSP160) (7 credits)

This course will study the chemical products currently available and used to straighten, smooth or relax natural curl. The chemical content and its relation to the structure of hair will be studied to help students better understand and choose products according to client hair type and expectation.? Students will gain the theoretical knowledge and procedural steps in performing a chemical hair relaxer service with

instruction on importance of following manufacturers specifications and meeting client needs.

# Colour and Lighten Hair 3 (HSP161) (7 credits)

This course provides the students with the opportunity and tools to study current trends in hair colouring and lightening hair. The relevant knowledge of where and how to research,? visual analysis ?and replicate current trends in colour, lightening and toning hair practises will be the main focus for students to study. Upon successful completion of this course students will have the ability to replicate current trends with proficiency and confidence using a variety of new tools, products and methods of application to meet the trend results.

# Hair Additions 2 (HSP162) (3 credits)

This course is a continued building of skills providing students the instruction and opportunity to work with a variety of hair addition types and fibres. Students will develop skills that will enable them to use specialized tools and maintenance strategies when working with various types of hair additions. Student will gain the knowledge and practical skills to color, cut and style various types of hair additions using selected products and service techniques.

# **Global Citizenship** (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Adventure Recreation and Parks Technician

Section B.127 6/2/2020

**Ontario College Diploma (2 Years - 4 Semesters ) (5212)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Looking for a fun and challenging career in the outdoors? Interested in learning a variety of recreational and wilderness-based skills? This is the program for you.

The natural, rugged wilderness of the Algoma Highlands and Lake Superior region make the Sault area an ideal location for studying parks and Adventure recreation. The area contains several provincial parks and Parks Canada facilities, conservation areas, municipal parks, and outdoor recreational facilities. Included in this list are several Michigan State parks and U. S. National parks and forests, all within a short drive of Sault College.

Unique in Canada, our two-year Adventure Recreation and Parks Technician program offers you a broad background in natural resource management, with quality instruction in three major areas of concentration: Parks, Adventure Recreation, and Travel & Ecotourism. Specialty courses in the parks field include Park Operations, Park Interpretation, and Park Protection.

Adventure recreation training forms the second major component of our program and includes specialty courses in Recreation Planning, Adventure Recreation, and our Second Year Field Camp travel & ecotourism training forms the last major component of our program, and includes specialty courses in Ecotourism, and Adventure Expeditions.

Field trips and hands-on experience form an important part of the program. Students will visit a number of park systems and outdoor recreational facilities in the Lake Superior region. Knowledge of the natural environment will be stressed through acquiring field identification skills in a number of different courses such as Trees and Shrubs, Plant Diversity, Animal Diversity, and Regional Geology. During fall camp, students will be exposed to a number of skill areas in the outdoor recreation field, such as canoeing, kayaking, rock climbing, and wilderness camping.

As part of our commitment to providing practical, hands-on training and skills necessary to secure long-term employment, our program offers valuable opportunities to acquire employer recognized certifications where feasible. Many of these certifications are provincially or nationally recognized. Some of the specialized parks-related training which may be outside of class includes Chainsaw Operator Safety and Heritage Interpreter certification. Specialized outdoor recreation-related training may also be offered and may include certification in wilderness survival, kayaking, canoeing, nordic and alpine skiing, snowboarding, rock and ice climbing, and scuba diving. All certifications are subject to specific requirements and where applicable additional fees. Some certification courses are arranged through the School of Continuing Education at an additional cost to the student. Most of these certifications are provincially or nationally recognized.

Students may have the opportunity to be involved in applied research projects. Please see the `Applied Research Centre` section for more information relating to the Sault College Applied Research Centre.

#### **PROGRAM OUTCOMES**

A graduate of the Sault college Adventure Recreation and Parks Technician program will reliably

demonstrate the ability to:

1. Demonstrate clear, concise and industry appropriate written, spoken and visual communication skills.

2. Identify, discuss, organize and assess common Flora & Fauna species found throughout ON, including biological and physiological characteristics.

3. Describe how the six park systems in Ontario are managed and operated.

4. Identify and evaluate the requirements for leading and participating in expeditions or field exercises using a variety of Adventure Recreationactivities.

5. Start and manage a career in the Adventure Recreation and Parks field.

6. Demonstrate a sound understanding of the significance of the Adventure Recreation and Parks Industry including relevant legislation, trends and issues.

7. Describe the scientific method and how it shapes our understanding of the ecology of the natural world.

8. Demonstrate an understanding of sustainable development and apply the foundations in the natural environment.

9. Safely operate and maintain equipment used in Adventure Recreation and Park operations.

10. Evaluate and apply current technologies and mathematical concepts used to collect, manage and analyze data.

12. Analyze, evaluate and apply subjective and objective safety considerations for Adventure Recreation and Parks activities.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C or mature student status.

# **CAREER PATHS**

Graduates of the program are trained to work in the public and private sectors, including Parks Canada, the Ontario Ministry of Natural Resources and Forestry, conservation authorities, municipal parks departments, and private park owners. Examples of employment found within these park agencies include Park Warden, Park Interpreter, Resource Technician, and Park Superintendent.

In the Adventure Recreation field opportunities include employment prospects with adventure travel and ecotourism companies, either as a guide or business owner. Graduates may become recreational instructors at outdoor centres and children's camps, teaching a variety of skills such as canoeing and kayaking. Opportunities as snowboard/ski instructors in winter or wilderness outfitters and/or retailers may also be available.

# **MANDATORY FEES**

Domestic

Tuition	Ancillary	Tuition	Ancillary
\$2,975.80	\$1,567.00	\$15,463.10	\$2,027.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

This is a Co-operative Education Program. September and January Intakes are available for this program.

This is a co-operative education program. Students are required to complete at least one co-op work placement (CWF100) in order to graduate. Work placement and career development skills are taught as one module in the Natural Resources Career Management course in Semester 2. For more information contact Program Coordinators Brian Anstess and Ryan Namespetra at:

Brian.Anstess@saultcollege.ca 705-759-2554 Ext: 2461

Ryan.Namespetra@saultcollege.ca 705-759-2554 Ext: 2853

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I NET100-3 Fish and Wildlife Studies I NRT101-3 Trees and Shrubs I NRT111-4 Park Operations NRT123-3 Outdoor Navigation NRT130-3 Adventure Recreation I NRT131-2 Fall Field Camp - First Year NRT141-3 Science and Nature

# **SEMESTER 2**

CWF100-3 Co-op Work Placement I Note: CWF100-3 is mandatory and takes place in the summer. MTH165-3 Numeracy and Quantitative Reasoning NET105-3 Fish and Wildlife Studies II NET107-3 Outdoor Equipment Certifications NRT109-3 Ecology NRT116-2 Natural Resources Career Management NRT133-3 Trees and Shrubs II NRT134-3 Adventure Recreation II NRT145-3 Horticulture Groundskeeper

# **SEMESTER 3**

NET108-4 Geographic Information Systems NRT212-3 Park Interpretation NRT232-2 Fall Camp - Parks and Adventure Recreation - Second Year NRT234-3 Adventure Recreation and Parks Leadership NRT238-3 Physical Geology NRT256-3 Ecosystem Classification NRT260-4 Trail Construction and Facility Maintenance

#### GEN100-3 Global Citizenship

# **SEMESTER 4**

NRT211-3 Protecting Park Values NRT225-4 Wilderness Survival Skills NRT231-3 Planning Recreational Events NRT233-3 Adventure Ecotourism NRT240-2 Natural Resources Law NRT242-2 Natural Environment Business Management NRT235-2 Sustainable Resource Management

# Select one of the following:

GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **Course Descriptions**

#### Semester 1

# Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

# Fish and Wildlife Studies I (NET100) (3 credits)

This course concentrates on fundamental aspects of anatomy, physiology, and ecology of Ontario birds, Ontario Turtles, Ontario Snakes and Ontario Amphibian species. Lab sessions will develop skills in identification and classification, as well provide knowledge and experience with commonly used field inventory techniques.

# Trees and Shrubs I (NRT101) (3 credits)

This course will provide a systematic study of structural characteristics of trees and shrubs, the identification of Canadian species by leaf features, their relationships to one another and recognition of their dynamic role in forest ecology. Coniferous species will be studied in considerable detail including twig, bark and growth characteristics.

# Park Operations (NRT111) (4 credits)

As one of the core background courses in the Parks & Outdoor Recreation program, students will be introduced to a number of major park systems where employment opportunities are found. All lectures provide a systematic review of the agencies that manage parks and protected areas in Canada. In addition, the labs focus on preparing students for seasonal and full-time employment through coverage of traditional park positions. Park management objectives and current issues in parks will also be discussed, and studied through practical exercises such as the Park Investigative Report. There will be field trips scheduled throughout the term.

# Outdoor Navigation (NRT123) (3 credits)

Students will gain skills in orienteering and navigating in forested areas using a magnetic hand compass, topographic maps (OBM, NTS), OMNR standard aerial photographs and global positioning systems (GPS). Students will use a navigational protractor, metric scale, and digital planimeter in the planning and

presentation of field exercises. Pacing and distance measurement devices (50 m rope, 30 m tape, Hip-Chain) will be used to measure distances in a team environment. Calculations of distance, area and pacing factors will be covered.

# Adventure Recreation I (NRT130) (3 credits)

Providing a foundation in Canoeing, Kayaking, Hiking and Biking this course will bring students on an exploration of nature through human power. With a strong emphasis on safety students will learn how equipment works, how to maintain it and proper transportation techniques to venues. Utilizing world class trails, routes and the awe inspiring Lake Superior students will increase their fitness and learn efficiency techniques of cycling, paddling and hiking.

# Fall Field Camp - First Year (NRT131) (2 credits)

A one week period in the fall will provide the new student with practical outdoor natural resource related skills including watercraft handling, compassing, tree identification and hand tool and power tool maintenance use.

# Science and Nature (NRT141) (3 credits)

This course examines six topics of science that are fundamental to an understanding of the role of research and the relationship of biology and chemical interaction to natural resource management. Topics include the Science and the Scientific Method, Systems in Nature, The Species in an Evolutionary Context, The Cell as the Fundamental Unit of Life, Water as a Medium for Life, and Chemical Interactions in the Environment.

# Semester 2

# Co-op Work Placement I (CWF100) (3 credits)

The student will acquire natural resources work experience in various areas of natural resources. Particular emphasis will be placed on the importance of interpersonal, teamwork, technical, and leadership skills as they meet the daily challenges of a dynamic workplace environment.

# Numeracy and Quantitative Reasoning (MTH165) (3 credits)

This course focuses on developing the students number sense and problem solving abilities using a variety of tools and strategies that include computer technology. Skills required to perform mental calculations and communicate mathematical concepts and processes will be emphasized and assessed. By the end of the course, the student will be able to interpret mathematical models, represent quantitative information in a variety of ways and use different mathematical and statistical methods to solve problems. Topics include number sense, geometry, measurement, trigonometry, percent and descriptive statistics.

# Fish and Wildlife Studies II (NET105) (3 credits)

Students will learn to identify, discuss life cycles and interpretive value of selected freshwater fishes and mammals.. Common wildlife species will be identified by their tracks & signs, scat, fur and skull. Field surveys will be conducted to assess wildlife habitat.

# Outdoor Equipment Certifications (NET107) (3 credits)

Students will demonstrate the proper mixing of fuel, retrieve and maintain field equipment, demonstrate safe trailer operation and successfully complete the Canada Safety Council ATV Safe Rider course, and the Sault College Chainsaw and Brush saw courses.

# Ecology (NRT109) (3 credits)

This is an introductory course to provide students with an understanding of ecology as it relates to people who work with renewable resources. The course covers a wide range of topics that examine the interactions between plants and animals and their physical environment. A combination of lectures, labs and field surveys provide insight into the structure and function of ecosystems in general; but emphasize forest and freshwater aquatic ecosystems in Canada.

# Natural Resources Career Management (NRT116) (2 credits)

This course will provide the student with the skills, tools and knowledge necessary to develop and manage their careers in the Natural Resources Field. This course will include researching Natural Resources employers, how and when to apply to Natural Resources employers, trends in Natural Resources employment areas, what Natural Resources employers like and don't like in a resume, interview tips for Natural Resources employment in Natural Resources, planning your career in Natural Resources, teamwork and interpersonal skills used in Natural Resources, the importance of attitude in career development and the preparation of the student for the CWF100 Co-op Work Term Placement.

# Trees and Shrubs II (NRT133) (3 credits)

Students will gain the skill of winter identification of major tree and shrub species that are representative of the forest regions and urban areas of Ontario. Students will also identify dwarf woody plants and herbs commonly found in Ontario woodlands. The silvics of tree species and the ecology of plant associations will be studied to complement the identification of tree, shrub and herbaceous plant species.

# Adventure Recreation II (NRT134) (3 credits)

This course will involve a series of outdoor education workshops focused on expanding student knowledge of outdoor recreational programming for both children and adult groups. This is a skills-oriented course, where students will be trained to work as outdoor recreation programmers and instructors for work with a variety of different employers including: parks, outdoor education centers, children's camps, recreational resorts, and a host of other related facilities. Field trips and hands-on experience focusing on experiential learning will be stressed. Topics such as employment opportunities in outdoor recreation, children's campfire programming, experiential education, team building games and initiatives, dog sledding, snowmobiling, snow shoeing, winter camping, Nordic skiing, alpine skiing, snowboarding, rock & ice climbing, horseback riding, and canoeing may be discussed.

# Horticulture Groundskeeper (NRT145) (3 credits)

Students will receive training in the care and maintenance of grasses, flowers, trees, shrubs and invasive plants associated with managed and manicured landscapes. Practical experience with appropriate equipment in mowing, trimming, watering, planting and transplanting, pest management and pruning will be emphasized. Potential is available to earn the Land Class 1 Pesticide Applicators License.

# Semester 3

# Geographic Information Systems (NET108) (4 credits)

The aim of this course is to introduce students to the use of Geographic Information Systems (GIS) as a source of immediate information and as an analytic tool for solving natural resource management problems. Students will be using ESRI's ArcGIS software.

# **Park Interpretation** (NRT212) (3 credits)

This practical, hands-on course will provide students with the skills and knowledge required by front-line park interpreters or wilderness interpretive guides working in the ecotourism industry. Oral communication skills are stressed, as are skills in the use of audio-visual equipment and other related hardware. Students will deliver a number of individual presentations, as well as a major group presentation suitable for provincial and national parks or environmental education centers.

# Fall Camp - Parks and Adventure Recreation - Second Year (NRT232) (2 credits)

Parks and Outdoor Recreation students will take part in a variety of wilderness-based outdoor recreational activities such as canoe tripping, sea kayaking, backcountry camping, rock climbing, and high ropes course training. Students will also be trained to organize and deliver a group campfire program.

# Adventure Recreation and Parks Leadership (NRT234) (3 credits)

The culmination course for Adventure Recreation students will teach, manage and lead mini expeditions

honing their skills and techniques in a variety of human power adventures. Judgment, assessment of capabilities and team dynamics will be the main focus of this course while the classroom will be the incredible wilderness of the Lake Superior Basin. Students will learn to persevere through bad weather, fatigue, equipment malfunctions and self imposed barriers humans place on themselves. Students will emerge from this course having the confidence and skills to tackle life's expeditions.

#### Physical Geology (NRT238) (3 credits)

The study of earth's ever changing nature. This course looks at the make-up of the earth, how it was formed, how it has evolved and how it is changing today. Topics include the formation of the earth, geologic time, plate tectonics, mineral identification, rocks, fossils and glaciation with an emphasis on the Lake Superior area.

# Ecosystem Classification (NRT256) (3 credits)

Ecosystem classification is a survey of natural aquatic and terrestrial ecosystems and associated plant communities found in central Ontario. A wide variety of plants will be identified. Emphasis will be placed on using plants for the classification of forest and wetland ecosystems using ecological classification systems designed for use in the local area.

# Trail Construction and Facility Maintenance (NRT260) (4 credits)

Trails have had a huge and historical impact on transportation, travel, tourism and recreation in Canada. Never has this been more evident than now. The Trans Canada Trail is unifying the nation, while recreationists portage across parks, and urban cyclists find safe routes to work. A mixture of Art and Science, understanding the fundamentals of trail sustainability is an essential area of expertise for Adventure Recreation and Parks students. This course will examine the foundations of trails from organization and advocacy to the hard skills involved with building and maintenance.

# Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Semester 4

# Protecting Park Values (NRT211) (3 credits)

This course examines the effects of natural and man created disturbances (forest fires, forest insects, tree diseases and recreational stressors) on the ecological health of and their management in, parks and protected areas. Fire ecology, fire suppression and fire use (prescribed burning) concepts, tools and techniques are introduced. Park protection issues will be covered including: assessing and ameliorating the impacts of recreational activities on parks, invasive plant species, restoration concepts, the concept of ecological integrity, and commemorative heritage protection.

# Wilderness Survival Skills (NRT225) (4 credits)

Students will learn the important necessary skills required to professionally conduct extended backcountry trips for guiding in the adventure tourism industry. Topics will include: client expectations and professionalism, specialized training and certification (hard skills), trip planning and preparation, outdoor clothing and gear selection, outdoor cooking and nutrition, leave no trace camping, wilderness safety, liability and risk management, wilderness survival, outdoor leadership, and wilderness communication. Case examples of high profile adventure travel companies will be explored.

# Planning Recreational Events (NRT231) (3 credits)

Recreation planning will be examined on two levels; the planning of recreation uses on public lands and private resorts, and the planning of special events. Through case studies, students will discuss: ways to integrate land uses, anticipate and reconcile use conflicts, funding and staffing constraints, impact monitoring techniques, managements planning, etc. Recreational event planning processes will be introduced using case studies. Students will plan and implement a community event.

# Adventure Ecotourism (NRT233) (3 credits)

This introductory course provides students with an overview of the variety and scope of adventure ecotourism opportunities in Canada. Students will be given the chance to research the local natural and human history of the Algoma region, and apply their knowledge when conducting day-long guided adventure ecotours in the field. Logistical and safety issues will be experienced and considered in the design of these educational tours. This course directly ties into other courses such as Adventure Recreation one and two as students will be using techniques learned in those classes and will be responsible for designing and executing the full scope of their Adventure Ecotour.

# Natural Resources Law (NRT240) (2 credits)

This course will acquaint natural resource students with pertinent issues in the Canadian and Ontario justice systems and enforcement procedures. Students will be required to have a working knowledge of the content and significance of legislation related to natural resource use. A section will be devoted to aboriginal rights related to natural resources. Compliance monitoring and enforcement protocols will be emphasized.

# Natural Environment Business Management (NRT242) (2 credits)

This course is an introduction to operating a small business in the rapidly expanding private sector of natural resources. Case studies will be used to demonstrate the operation of local natural resource businesses. Major topics covered in the course are self-evaluation, needs assessment, market analysis, financial assistance programs, components of a small business plan, types of small businesses and management styles.

# Sustainable Resource Management (NRT235) (2 credits)

This course will explain the principles and practices involved in carrying out sustainable resource management. The full range of values provided by forests will be described and methods of protecting, maintaining or enhancing those values will be presented. Forest, wildlife or recreation management practices, which integrate the management of all forest values, will be introduced.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Fish and Wildlife Conservation Technician

Section B.128 6/2/2020

**Ontario College Diploma (2 Years - 4 Semesters ) (5214)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Do you love being outside and working with plants, animals and the natural environment? Come to Sault College in the heart of the Algoma forest and be part of our nationally recognised fish and wildlife program.

The two-year Fish and Wildlife Conservation Technician program provides the graduate with a broad background in natural resources and specialized skills in the fish and wildlife field. Extensive fieldwork is carried out regularly and annual field camps are part of the program. Students develop skills and knowledge about fisheries and wildlife management and perform field and lab surveys. A number of courses provide insight into integrated resource management techniques that consider forests and recreational lands as multi value natural resources that provide a broad array of benefits.

Letting nature be your teacher is what the Fish and Wildlife Conservation Technician Program is all about! Sault Ste. Marie is located in the heart of the Great Lakes-St. Lawrence mixed forest with ready access to the boreal forest to the north. Numerous streams, lakes, and rivers with both warm water and cold water populations are located within easy travel distance. As well as being home to the Great Lakes Forestry Centre, the Ontario Forest Research Institute, and the Forest Pest Management Institute, Sault Ste. Marie is the centre of many fish and wildlife management projects. A provincial fish hatchery, four district area offices of the Ontario Ministry of Natural Resources and Forestry, an acid precipitation field station, and the Chapleau Crown Game Preserve are all located in the area.

While you'll spend time in traditional classroom settings with lectures and labs to introduce theoretical material, much of your time will be spent outside seeing wildlife resources and practicing the skills you'll be learning.

Students may have the opportunity to be involved in applied research projects. Please see the `Applied Research Centre` section for more information relating to the Sault College Applied Research Centre.

# **PROGRAM OUTCOMES**

# A graduate of the Sault College Fish and Wildlife Conservation Technician Program will reliably demonstrate the ability to:

1. Demonstrate clear, concise and industry appropriate written, spoken and visual communication skills.

2. Identify, discuss, organize and assess common flora and fauna species found throughout Ontario, including biological characteristics.

3. Demonstrate the ability to follow standardized protocols to collect field data on fish and wildlife populations in a variety of weather and site conditions.

4. Demonstrate the correct use of standard laboratory equipment and skills required to carry out experiments and study various organisms.

5. Start and manage their careers in the Fish and Wildlife Conservation field.

6. Understand the importance of managing fish and wildlife resources in Ontario and related federal, provincial and municipal legislation.

7. Recognize the contributions and applications of various science disciplines in the understanding of natural environments.

8. Demonstrate an understanding of sustainable development and apply these principles to the natural environment.

9. Safely operate and maintain equipment used in Fish and Wildlife Conservation.

10. Evaluate and apply current technologies and mathematical concepts used to collect, manage and analyze data.

11. Analyze, evaluate and apply subjective and objective safety considerations.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C or mature student status.

# **CAREER PATHS**

Graduates of the Fish and Wildlife Conservation Technician program may find employment as fisheries or wildlife technicians, conservation officers, hatchery workers, area technicians, resource technicians, research technicians, or laboratory technicians with organizations such as the Ontario Ministry of Natural Resources and Forestry, conservation authorities, regional municipalities, and natural resource consultants.

A majority of technician graduates find seasonal employment immediately. You may need to develop experience to secure a permanent, full-time position. Graduates of this program may opt to continue their studies in an Honours BSc degree program through transfer agreements with certain Canadian and Michigan universities.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,975.80	\$1,534.00	\$15,463.10	\$1,994.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

This is a Co-operative Education Program. September and January Intakes are available for this program. Please contact the Registrar's Office for further information.

This is a co-operative education program. Students are required to complete at least one co-op work placement (CWF100) in order to graduate. Work placement and career development skills are taught as one module in the Natural Resources Career Management course in Semester 2.

For more information contact Program Coordinators Ryan Namespetra and Brian Anstess at:

Ryan.Namespetra@saultcollege.ca 705-759-2554 Ext: 2853

Brian.Anstess@saultcollege.ca 705-759-2554 Ext: 2461

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I MTH165-3 Numeracy and Quantitative Reasoning NRT101-3 Trees and Shrubs I NRT110-3 Introduction to Fish and Wildlife NRT123-3 Outdoor Navigation NRT131-2 Fall Field Camp - First Year NRT141-3 Science and Nature GEN100-3 Global Citizenship

# **SEMESTER 2**

CMM210-3 Technical Communication CWF100-3 Co-op Work Placement I Note: CWF100-3 is mandatory and takes place in the summer. NET107-3 Outdoor Equipment Certifications NET108-4 Geographic Information Systems NRT109-3 Ecology NRT116-2 Natural Resources Career Management NRT133-3 Trees and Shrubs II NRT135-3 Ornithology

# **SEMESTER 3**

NET200-3 Aquatic Ecosystem Surveys NET201-2 Second Year Fall Field Camp NET204-3 Remote Sensing NET210-3 Wetland Conservation NRT205-4 Wildlife Biology and Management NRT223-3 Resource Sampling NRT228-3 Ichthyology NRT256-3 Ecosystem Classification

# **SEMESTER 4**

NET255-4 Environmental Monitoring NRT240-2 Natural Resources Law NRT242-2 Natural Environment Business Management NRT253-3 Fish Culture and Management NRT255-4 Wildlife Survey Techniques NRT235-2 Sustainable Resource Management

Select one of the following:

#### GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **Course Descriptions**

# Semester 1

# Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

# Numeracy and Quantitative Reasoning (MTH165) (3 credits)

This course focuses on developing the students number sense and problem solving abilities using a variety of tools and strategies that include computer technology. Skills required to perform mental calculations and communicate mathematical concepts and processes will be emphasized and assessed. By the end of the course, the student will be able to interpret mathematical models, represent quantitative information in a variety of ways and use different mathematical and statistical methods to solve problems. Topics include number sense, geometry, measurement, trigonometry, percent and descriptive statistics.

# Trees and Shrubs I (NRT101) (3 credits)

This course will provide a systematic study of structural characteristics of trees and shrubs, the identification of Canadian species by leaf features, their relationships to one another and recognition of their dynamic role in forest ecology. Coniferous species will be studied in considerable detail including twig, bark and growth characteristics.

# Introduction to Fish and Wildlife (NRT110) (3 credits)

This practical course will introduce the student to field procedures to assess fish and wildlife habitat and relative abundance of animal populations. Field data will be recorded, analyzed and summarized in report format. Collection techniques for terrestrial and aquatic specimens will be practiced, including preparation, mounting and display. In addition employment opportunities will be discussed and several guest speakers and tours will address specific opportunities in the Fish and Wildlife field.

# Outdoor Navigation (NRT123) (3 credits)

Students will gain skills in orienteering and navigating in forested areas using a magnetic hand compass, topographic maps (OBM, NTS), OMNR standard aerial photographs and global positioning systems (GPS). Students will use a navigational protractor, metric scale, and digital planimeter in the planning and presentation of field exercises. Pacing and distance measurement devices (50 m rope, 30 m tape, Hip-Chain) will be used to measure distances in a team environment. Calculations of distance, area and pacing factors will be covered.

# Fall Field Camp - First Year (NRT131) (2 credits)

A one week period in the fall will provide the new student with practical outdoor natural resource related skills including watercraft handling, compassing, tree identification and hand tool and power tool maintenance use.

# Science and Nature (NRT141) (3 credits)

This course examines six topics of science that are fundamental to an understanding of the role of research and the relationship of biology and chemical interaction to natural resource management. Topics include

the Science and the Scientific Method, Systems in Nature, The Species in an Evolutionary Context, The Cell as the Fundamental Unit of Life, Water as a Medium for Life, and Chemical Interactions in the Environment.

# Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Semester 2

# Technical Communication (CMM210) (3 credits)

This course provides training in technical communication. Emphasis is given to memos, letters, forms, and reports. Oral reporting and its importance on the job are also included. The effective use of computers to research and generate technical documents is an essential component of this course. The theory of writing is taught through the writing process.

# Co-op Work Placement I (CWF100) (3 credits)

The student will acquire natural resources work experience in various areas of natural resources. Particular emphasis will be placed on the importance of interpersonal, teamwork, technical, and leadership skills as they meet the daily challenges of a dynamic workplace environment.

# Outdoor Equipment Certifications (NET107) (3 credits)

Students will demonstrate the proper mixing of fuel, retrieve and maintain field equipment, demonstrate safe trailer operation and successfully complete the Canada Safety Council ATV Safe Rider course, and the Sault College Chainsaw and Brush saw courses.

# Geographic Information Systems (NET108) (4 credits)

The aim of this course is to introduce students to the use of Geographic Information Systems (GIS) as a source of immediate information and as an analytic tool for solving natural resource management problems. Students will be using ESRI's ArcGIS software.

# Ecology (NRT109) (3 credits)

This is an introductory course to provide students with an understanding of ecology as it relates to people who work with renewable resources. The course covers a wide range of topics that examine the interactions between plants and animals and their physical environment. A combination of lectures, labs and field surveys provide insight into the structure and function of ecosystems in general; but emphasize forest and freshwater aquatic ecosystems in Canada.

# Natural Resources Career Management (NRT116) (2 credits)

This course will provide the student with the skills, tools and knowledge necessary to develop and manage their careers in the Natural Resources Field. This course will include researching Natural Resources employers, how and when to apply to Natural Resources employers, trends in Natural Resources employment areas, what Natural Resources employers like and don't like in a resume, interview tips for Natural Resources employment, how to network for employment in Natural Resources, planning your career in Natural Resources, teamwork and interpersonal skills used in Natural Resources, the importance of attitude in career development and the preparation of the student for the CWF100 Co-op Work Term Placement.

# Trees and Shrubs II (NRT133) (3 credits)

Students will gain the skill of winter identification of major tree and shrub species that are representative

of the forest regions and urban areas of Ontario. Students will also identify dwarf woody plants and herbs commonly found in Ontario woodlands. The silvics of tree species and the ecology of plant associations will be studied to complement the identification of tree, shrub and herbaceous plant species.

# Ornithology (NRT135) (3 credits)

This course will explore the biological and ecological life requirements of important groups of birds of Canada. Topics will include avian anatomy and physiology, bird habits and behaviour, field identification of raptors, shore birds, game birds, and non-game species such as passerines by sight and/or sound.

# Semester 3

# Aquatic Ecosystem Surveys (NET200) (3 credits)

Stream surveys will be conducted to assess ecosystem condition. Lake survey data will be interpreted including lake bathymetry. Students will conduct creel surveys as well as collecting and identifying 20 freshwater invertebrates.

# Second Year Fall Field Camp (NET201) (2 credits)

Students will gain hands-on field skills by working in groups to complete a variety of aquatic and terrestrial related activities. While in the field, students will conduct a lake survey, assess stream channel morphology, sample aquatic invertebrates, and conduct wildlife assessment surveys. Emphasis will be placed on developing field skills desired by potential natural resources related employers. Evening activities will aim to further develop the students appreciation for the natural environment through guest speakers and a wildlife tour.

# Remote Sensing (NET204) (3 credits)

This course studies target energy interactions recorded by aerial & satellite remote sensing platforms.? Photogrammetric measurements using both hardcopy and softcopy images will be applied including displacement & scale calculations, areas, heights and distances.? Remote sensing principles such as resolution types will be discussed.? The digital aerial photography system currently used by the Ontario Ministry of Natural Resources will be presented to students.

# Wetland Conservation (NET210) (3 credits)

This course provides the biological background for management of wetland habitats, emphasizing aquatic community component identification, biology and management. Students will learn how to evaluate wetlands, assess their limitations, and research and design a plan for their enhancement to optimize recreational, social, aesthetic and economic values.

# Wildlife Biology and Management (NRT205) (4 credits)

This course will introduce students to wildlife identification and biology, general management principles, population growth and carrying capacity. Lab components include mammal anatomy and physiology, tracks and signs, parasites and diseases. Emphasis will be on game and fur-bearing mammals and species at risk.

# Resource Sampling (NRT223) (3 credits)

This course introduces the student to the four basic concepts of natural resource sampling including the objective of a survey, data collection procedures, parametric and statistical compilations and report writing. Students, in teams, will carry out various natural resource surveys including timber cruises, regeneration assessments, browse surveys, pellet counts and a parks survey using an opinion poll format. This is a general education course.

# Ichthyology (NRT228) (3 credits)

This course concentrates on fundamental aspects of anatomy, physiology, ecology and natural history of fishes of the Great Lakes Region. Lab sessions will develop skills in the identification and classification of freshwater fishes as well as in the identification of their common parasites. A freshwater small fish

collection is required for submission.

# Ecosystem Classification (NRT256) (3 credits)

Ecosystem classification is a survey of natural aquatic and terrestrial ecosystems and associated plant communities found in central Ontario. A wide variety of plants will be identified. Emphasis will be placed on using plants for the classification of forest and wetland ecosystems using ecological classification systems designed for use in the local area.

# Semester 4

# Environmental Monitoring (NET255) (4 credits)

This course will discuss types, sources and effects of pollutants on natural ecosystems through lectures, projects and lab experiments.

# Natural Resources Law (NRT240) (2 credits)

This course will acquaint natural resource students with pertinent issues in the Canadian and Ontario justice systems and enforcement procedures. Students will be required to have a working knowledge of the content and significance of legislation related to natural resource use. A section will be devoted to aboriginal rights related to natural resources. Compliance monitoring and enforcement protocols will be emphasized.

# Natural Environment Business Management (NRT242) (2 credits)

This course is an introduction to operating a small business in the rapidly expanding private sector of natural resources. Case studies will be used to demonstrate the operation of local natural resource businesses. Major topics covered in the course are self-evaluation, needs assessment, market analysis, financial assistance programs, components of a small business plan, types of small businesses and management styles.

# Fish Culture and Management (NRT253) (3 credits)

This course concentrates on management strategies for important sports and commercial species of fishes of the Great Lakes Region. Emphasis will be placed on harvest control, habitat manipulation/protection and fish stocking as management tools. In addition, hatchery requirements and operations for the culture of cold-water fish such as trout and salmon will be featured. There will be onsite visits to local hatcheries.

# Wildlife Survey Techniques (NRT255) (4 credits)

A field and lab-based course covering practical information-gathering and data record, food habit analysis, habitat evaluation techniques, radio-location telemetry, methods of determining population abundance, sexing and aging techniques, methods of capture, handling and marking wild animals, collection and preservation of specimens and evaluation and identification of wildlife damage.

# Sustainable Resource Management (NRT235) (2 credits)

This course will explain the principles and practices involved in carrying out sustainable resource management. The full range of values provided by forests will be described and methods of protecting, maintaining or enhancing those values will be presented. Forest, wildlife or recreation management practices, which integrate the management of all forest values, will be introduced.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Forestry Technician - Conservation

Section B.129 6/2/2020

Ontario College Diploma (2 Years - 4 Semesters ) (5230) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

If you are interested in the environment, want to make a difference in managing the forests of Canada and like the outdoors, this is the program for you. The Forest Technician - Conservation diploma program at Sault College is a sustaining member of the Canadian Institute of Forestry. This program prepares graduates with a wide range of skills necessary to contribute to environmentally sound management of forest ecosystems. Students learn practical skills such as the identification of such diverse ecosystem components as soils, trees, shrubs, plants, and bryophytes. Insects and diseases that attack forests are introduced and you will learn how to identify and control them. Sustainable resource management is a concept imbedded in all the program's courses. You will be taught how ecosystems function, interact and respond to natural and human disturbances. Forest management techniques are rapidly evolving to ensure the continuing availability of natural resources and to protect all the values that forests provide. With faculty who are continually upgrading their knowledge and skills and keeping in touch with Canada's professional forestry community, you will learn these latest techniques used to harvest, renew and protect our forests. Technology plays a key role in forestry today. In this program you will learn how to use modern tools and techniques such as computer mapping, GPS, tablets to collect data, digital aerial photography interpretation and the use of laser range and tree height finders. As well, you will gain proficiency in the use of essential outdoor tools such as chainsaws, brushsaws, ATVs and snowmobiles.

Sault Ste. Marie is an ideal setting to learn forestry as it is located in the heart of the Great Lakes - St. Lawrence forest while the boreal forest is within easy reach to the north. The Sault is a hub of forestry activity. The federal Great Lakes Forestry Centre and Forest Pest Management Institute and the provincial Ontario Forest Research Institute are both located here. As well, the headquarters for both Ontario's Ministry of Natural Resources and Forestry, Crown Forests and Lands Policy Branch and its Aviation, Flood and Fire Management branch are in the Sault while several integrated forest products companies make the city their base. Frequent field trips visit the operations of these agencies and companies.

Students may have the opportunity to be involved in applied research projects. Please see the `Applied Research Centre` section for more information relating to the Sault College Applied Research Centre.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for second career funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

# **PROGRAM OUTCOMES**

# A graduate of the Forestry Technician - Conservation Program at Sault College will reliably demonstrate the ability to:

- 1. conduct forest inventory surveys and field measurements to determine forest resources and values\* in forests and woodlots.
- 2. assess soil characteristics, vegetation and wildlife habitats to identify their interactions within forest ecosystems.
- 3. perform technical functions in silvicultural\* operations and assist in the monitoring and evaluation of the effectiveness of silvicultural\* practices.
- 4. collect, analyze, interpret, and display spatial data using mapping technology and Geographical

Information Systems (GIS) to contribute to forest resource management.

- 5. contribute to sustainable forest management plans, including conservation and rehabilitation measures, taking into consideration the perspectives of a variety of stakeholders and the requirements of relevant legislation and regulations.
- 6. identify and analyze forest diseases, pests, invasive species and other disturbance\* events and implement mitigation strategies to maintain and improve forest ecosystems.
- 7. select, operate, troubleshoot and maintain tools and equipment in a variety of environmental conditions and in accordance with safety and operating standards.
- 8. work independently and in a collaborative environment while applying effective teamwork, leadership and interpersonal skills.
- 9. communicate technical information to a variety of stakeholders in oral, written, visual and electronic forms.
- 10. develop strategies for ongoing professional development to enhance work performance in the forestry sector.

Reference:

Ministry of Training, Colleges and Universities, Forestry Technician Program Standards, MTCU 54203, June 2015

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School diploma with Grade 12 English (C) ENG4C or mature student status.

# **CAREER PATHS**

According to every recent employer poll, forestry in Canada is about to face an employment crisis with an insufficient number of trained forestry professionals and workers available as current employees retire. Sault College Forestry Technician - Conservation graduates are sought after by a wide variety of employers hoping to fill the following job types: resource and lands technicians, firefighting technicians, federal and provincial research technicians, photo interpretation analysts, inventory field workers and supervisors, greenhouse supervisors, insect and disease rangers, forest industry scalers, foremen and harvesting supervisors. Our graduates may find work in the forestry sector soon after graduation. A reality of today's world though is that work will generally be available to new graduates on a contract basis for a few years until your work abilities are demonstrated. The willingness to move throughout Ontario or Canada is a definite asset when looking for a job.

Graduate transfers to BScF degree programs are available at Lakehead University and Michigan Technological University. For more information, and to explore entrance requirements please contact Lakehead University and Michigan Technological University..

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,975.80	\$1,634.00	\$15,463.10	\$2,094.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

This is a co-operative education program. Students are required to complete at least one co-op work placement (CWF100) in order to graduate. Work placement and career development skills are taught as one module in the Natural Resources Career Management course in Semester 2.

For more information contact Program Coordinators Brian Anstess and Ryan Namespetra at:

Brian.Anstess@saultcollege.ca 705-759-2554 Ext: 2461

Ryan.Namespetra@saultcollege.ca 705-759-2554 Ext: 2853

# **PROGRAM OF STUDY**

# **SEMESTER 1**

CMM115-3 Communications I MTH165-3 Numeracy and Quantitative Reasoning NRT101-3 Trees and Shrubs I NRT123-3 Outdoor Navigation NRT131-2 Fall Field Camp - First Year NRT140-3 Forest Plant Biology NRT150-4 Forest Inventory NRT151-3 SP100 Forest Fire Fighter Certification

# **SEMESTER 2**

CMM210-3 Technical Communication CWF100-3 Co-op Work Placement I Note: CWF100-3 is mandatory and takes place in the summer. NET107-3 Outdoor Equipment Certifications NET108-4 Geographic Information Systems NRT109-3 Ecology NRT116-2 Natural Resources Career Management NRT133-3 Trees and Shrubs II NRT144-2 Wildlife Management NRT146-3 Silviculture I

# **SEMESTER 3**

NET204-3 Remote Sensing NRT203-3 Tree Marking NRT239-3 Silviculture II NRT243-4 Forest Health NRT252-2 Fall Camp - Forestry - Second Year NRT256-3 Ecosystem Classification NRT257-3 Introduction to Soil Science GEN100-3 Global Citizenship

# **SEMESTER 4**

NRT217-3 Applied Photo Interpretation NRT240-2 Natural Resources Law NRT242-2 Natural Environment Business Management NRT244-3 Urban Forestry NRT245-3 Forest Harvesting and Products NRT248-4 Forest Management and Planning NRT235-2 Sustainable Resource Management

#### Select one of the following:

GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

# Numeracy and Quantitative Reasoning (MTH165) (3 credits)

This course focuses on developing the students number sense and problem solving abilities using a variety of tools and strategies that include computer technology. Skills required to perform mental calculations and communicate mathematical concepts and processes will be emphasized and assessed. By the end of the course, the student will be able to interpret mathematical models, represent quantitative information in a variety of ways and use different mathematical and statistical methods to solve problems. Topics include number sense, geometry, measurement, trigonometry, percent and descriptive statistics.

# Trees and Shrubs I (NRT101) (3 credits)

This course will provide a systematic study of structural characteristics of trees and shrubs, the identification of Canadian species by leaf features, their relationships to one another and recognition of their dynamic role in forest ecology. Coniferous species will be studied in considerable detail including twig, bark and growth characteristics.

# Outdoor Navigation (NRT123) (3 credits)

Students will gain skills in orienteering and navigating in forested areas using a magnetic hand compass, topographic maps (OBM, NTS), OMNR standard aerial photographs and global positioning systems (GPS). Students will use a navigational protractor, metric scale, and digital planimeter in the planning and presentation of field exercises. Pacing and distance measurement devices (50 m rope, 30 m tape, Hip-Chain) will be used to measure distances in a team environment. Calculations of distance, area and pacing factors will be covered.

# Fall Field Camp - First Year (NRT131) (2 credits)

A one week period in the fall will provide the new student with practical outdoor natural resource related skills including watercraft handling, compassing, tree identification and hand tool and power tool maintenance use.

#### Forest Plant Biology (NRT140) (3 credits)

This course provides the student with a practical understanding of the classification, structure and functioning of plants in general with special consideration for woody plants. The concepts presented in this course will have direct application in a number of courses in the Forestry Technician Program.

# Forest Inventory (NRT150) (4 credits)

This is a foundational course which introduces students to the techniques and instruments used in forest inventory field measurements. Applicable software will be used in the analysis of field data.

# SP100 Forest Fire Fighter Certification (NRT151) (3 credits)

This course delivers the Ontario Ministry of Natural Resources and Forestry (OMNR&F) SP100 Firefighter Certification training. The SP100 is a nationally recognized certification standard that is required for anyone seeking employment on a fire crew in Canada. Students will gain the skills and knowledge necessary to meet the job requirements of an entry level crew member.

The majority of the course is delivered in the field practicing hands on skills. Practical experience using and retrieving suppression equipment such as the Mark III power pump, hand tools, radios and camping gear will be gained. Students will also work alongside a helicopter while performing a slinging operation. Theoretical knowledge delivered in the classroom will include fire behaviour, health safety and wellness, the incident command system and fuel handling.

# Semester 2

# Technical Communication (CMM210) (3 credits)

This course provides training in technical communication. Emphasis is given to memos, letters, forms, and reports. Oral reporting and its importance on the job are also included. The effective use of computers to research and generate technical documents is an essential component of this course. The theory of writing is taught through the writing process.

# Co-op Work Placement I (CWF100) (3 credits)

The student will acquire natural resources work experience in various areas of natural resources. Particular emphasis will be placed on the importance of interpersonal, teamwork, technical, and leadership skills as they meet the daily challenges of a dynamic workplace environment.

# Outdoor Equipment Certifications (NET107) (3 credits)

Students will demonstrate the proper mixing of fuel, retrieve and maintain field equipment, demonstrate safe trailer operation and successfully complete the Canada Safety Council ATV Safe Rider course, and the Sault College Chainsaw and Brush saw courses.

# Geographic Information Systems (NET108) (4 credits)

The aim of this course is to introduce students to the use of Geographic Information Systems (GIS) as a source of immediate information and as an analytic tool for solving natural resource management problems. Students will be using ESRI's ArcGIS software.

# Ecology (NRT109) (3 credits)

This is an introductory course to provide students with an understanding of ecology as it relates to people who work with renewable resources. The course covers a wide range of topics that examine the interactions between plants and animals and their physical environment. A combination of lectures, labs and field surveys provide insight into the structure and function of ecosystems in general; but emphasize forest and freshwater aquatic ecosystems in Canada.

# Natural Resources Career Management (NRT116) (2 credits)

This course will provide the student with the skills, tools and knowledge necessary to develop and manage their careers in the Natural Resources Field. This course will include researching Natural Resources employers, how and when to apply to Natural Resources employers, trends in Natural Resources employment areas, what Natural Resources employers like and don't like in a resume, interview tips for Natural Resources employment, how to network for employment in Natural Resources, planning your

career in Natural Resources, teamwork and interpersonal skills used in Natural Resources, the importance of attitude in career development and the preparation of the student for the CWF100 Co-op Work Term Placement.

#### Trees and Shrubs II (NRT133) (3 credits)

Students will gain the skill of winter identification of major tree and shrub species that are representative of the forest regions and urban areas of Ontario. Students will also identify dwarf woody plants and herbs commonly found in Ontario woodlands. The silvics of tree species and the ecology of plant associations will be studied to complement the identification of tree, shrub and herbaceous plant species.

#### Wildlife Management (NRT144) (2 credits)

Using current forest management guides as direction, this course will explore the impacts of forest management on fish and wildlife habitat with a focus on how species respond to changes in their environment. An emphasis will be placed on the identification of selected species and their habitat requirements, population monitoring techniques, and current forest harvesting practices used to mitigate potentially harmful effects to habitat.

#### Silviculture I (NRT146) (3 credits)

Students will be introduced to the traditional concepts of silviculture , Major topics will include seed collection, tree improvement, site preparation, stand tending , forest regeneration and silivicultural systems with a commitment to tie in ecological and wildlife values while applying silvicultural practices. Students will grow tree seedlings in a greenhouse. Silviculture I and II are intended to both be completed for a comprehensive exposure to the subject material.

#### Semester 3

#### Remote Sensing (NET204) (3 credits)

This course studies target energy interactions recorded by aerial & satellite remote sensing platforms.? Photogrammetric measurements using both hardcopy and softcopy images will be applied including displacement & scale calculations, areas, heights and distances.? Remote sensing principles such as resolution types will be discussed.? The digital aerial photography system currently used by the Ontario Ministry of Natural Resources will be presented to students.

#### Tree Marking (NRT203) (3 credits)

Tree Marking is a course designed to introduce students to the theoretical and operational application of tree marking for partial cutting systems (selection and shelterwood) used in Ontario. Students will develop the knowledge and awareness required to obtain desired regeneration by manipulating stand density, composition and recognizing individual tree classification. Emphasis will be made on recognizing and maintaining special habitat features important to wildlife. Students taking this course may be eligible to be tested for provincial tree marking certification through a cooperative arrangement with the Ontario Ministry of Natural Resources.

#### Silviculture II (NRT239) (3 credits)

A continuation of Silviculture I with an additional added emphasis on silvicultural assessments that forest technicians carry out. Reforestation audits, regeneration surveys, pre harvest stand analysis and others will be carried out with the use of handheld GPS systems to assist in planning and monitoring silvicultural effectiveness on crown land.

# Forest Health (NRT243) (4 credits)

This course provides the student with an introduction to the study of insects and diseases of forest trees, their impacts and control measures. Emphasis will be placed on identifying and describing the most

commonly occurring infectious forest pathogens and insect species associated with commercial tree species in eastern Canada.

# Fall Camp - Forestry - Second Year (NRT252) (2 credits)

Students will carry out practical exercises and perfect outdoor skills as they relate to a forest technician. Exercises are drawn from the forest soils, photogrammetry, mapping and forest measurements, silviculture, dendrology and resource sampling courses. Students will utilize aerial photographs, NTS and OBM topographic maps as well as reaching sites through the use of various modes of transportation (walking, all terrain vehicles, and canoes). Soil pits, FEC work, compassing and chaining, evaluating thinning trials, using a GPS (Global Positioning System) unit, using a DAP electronic data recorder, timber cruising, aerial photo interpretation, plantation assessment and visiting a seed orchard all form part of the field camp activities.

# Ecosystem Classification (NRT256) (3 credits)

Ecosystem classification is a survey of natural aquatic and terrestrial ecosystems and associated plant communities found in central Ontario. A wide variety of plants will be identified. Emphasis will be placed on using plants for the classification of forest and wetland ecosystems using ecological classification systems designed for use in the local area.

# Introduction to Soil Science (NRT257) (3 credits)

This forest soils course highlights the relationships between landforms, geology, soils and forest ecosystems. The course covers landform origin, description and identification, soil profile development and soil classification and the fundamentals of the physical and chemical properties of forest soils. Students complete a major project comparing and contrasting the biophysical elements of two different eco-sites.

# Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Semester 4

# Applied Photo Interpretation (NRT217) (3 credits)

The student will further enhance his/her knowledge and skills in identifying tree species, delineating forest stands, identifying site types through glacial landform recognition and the application of aerial photos for the data collection. Conventional OMNR aerial photography, large-scale aerial photography (LSP) and satellite imagery will be involved.

# Natural Resources Law (NRT240) (2 credits)

This course will acquaint natural resource students with pertinent issues in the Canadian and Ontario justice systems and enforcement procedures. Students will be required to have a working knowledge of the content and significance of legislation related to natural resource use. A section will be devoted to aboriginal rights related to natural resources. Compliance monitoring and enforcement protocols will be emphasized.

# Natural Environment Business Management (NRT242) (2 credits)

This course is an introduction to operating a small business in the rapidly expanding private sector of natural resources. Case studies will be used to demonstrate the operation of local natural resource businesses. Major topics covered in the course are self-evaluation, needs assessment, market analysis, financial assistance programs, components of a small business plan, types of small businesses and management styles.

# Urban Forestry (NRT244) (3 credits)

The focus of this course is on the care, health and protection of municipal trees, forests and green spaces. Students will be versed in arboriculture practices and techniques, tree inventories and appraisals and as well have an understanding of the planning, policies, programs, by-laws and public education required to maintain urban trees.

# Forest Harvesting and Products (NRT245) (3 credits)

The forest harvesting portion of this course will prepare students to devise a small scale harvesting plan, using modern day equipment, while developing an understanding of both economical and operational constraints. Practical training in skid trail layout, harvest cut blocks and post-harvest assessments through GPS systems will be applied. The forest products aspect of this course is based on understanding the supply and demand in everyday operations and dealing with present markets. Current trends associated with whole tree harvesting, bio-energy for cogeneration facilities, non-forest timber products (NFTP) and value added wood products will be explored.

# Forest Management and Planning (NRT248) (4 credits)

Forest Management and Planning focuses attention on a wide range of resource management issues that relate to the forest management planning process in Ontario. Emphasis is placed on legislation and practical aspects of planning for forest access, forest harvesting and silvicultural operations. The Forest Management and Planning Manual, Landscape Guide and Stand and Site Guide will act as references. Emphasis will be placed on incorporating practical GIS applications into labs and projects.

# Sustainable Resource Management (NRT235) (2 credits)

This course will explain the principles and practices involved in carrying out sustainable resource management. The full range of values provided by forests will be described and methods of protecting, maintaining or enhancing those values will be presented. Forest, wildlife or recreation management practices, which integrate the management of all forest values, will be introduced.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Natural Environment Technician -Conservation and Management

Section B.130 6/2/2020

Ontario College Diploma (2 Years - 4 Semesters ) (5220) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

This is a Co-operative Education Program. September and January intakes are available. Please contact the Registrar's Office for further information.

Want to contribute to conserving and protecting our natural environment? Are you interested in learning how natural ecosystems function and interact? Do you want a rewarding career carrying out work leading to the sustainability of natural resources?

If you answered yes, this is the program for you. Our team of experienced Natural Environment faculty can teach you the skills you'll need to gain meaningful employment in the rapidly expanding environmental sector.

Students will study the natural environment and learn to understand how ecosystem components interact together. You'll be taught how to identify organisms including birds, fish, mammals, insects, fungi, plants and trees. The physical parts of ecosystems are critically important to their function, so emphasis will be placed on understanding the climatic and geological forces that have shaped the land. Courses in forest soils and aquatic resources will provide students with knowledge of these processes.

The focus of this program will be on teaching field skills and techniques which are essential for the inventory, evaluation and monitoring of natural communities. Practical field training will be provided to teach navigating in wild areas using compasses and GPS, and using canoes, motorized boats, ATV's and snowmobiles for back country transportation. You'll also learn the latest techniques to monitor and measure natural resources.

The location of Sault College makes it ideal for this program. The rugged natural wilderness of the Algoma Highlands and Lake Superior provide unlimited opportunities for outdoor activity. While classroom lectures and labs provide the theoretical background for the program, much of your time will be spent outside doing hands on applications of what you've learned. A critical appreciation of ecosystem function within urban environments will also develop, as students learn of the capacity of the natural environment to solve common urban issues.

Numerous Natural Resource agencies make Sault Ste. Marie their home (e.g., Ontario Forest Research Institute, Great Lakes Forest Research Centre, Department of Fisheries and Oceans Sea Lamprey Control Centre, and Invasive Species Centre). The city is also touted as the renewable energy capital of Canada. With the opportunity to visit a variety of local sites, students learn how natural resources are assessed and utilized to provide clean energy. At the core of these projects are the natural heritage assessments and ongoing monitoring that contribute to long term sustainability. Students will apply a variety of technologies in this important effort to mitigate climate change, yet ensure an energy rich society.

Graduates of this 2 year program are encouraged to continue their studies in the Natural Environment Technologist program though a technician diploma may be awarded after 4 semesters. Students may have the opportunity to be involved in applied research projects. Please see the `Applied Research Centre` section for more information relating to the Sault College Applied Research Centre.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for second

<u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

#### **PROGRAM OUTCOMES**

# A graduate of the Natural Environment Technician Conservation and Management Program at Sault College will reliably demonstrate the ability to:

- 1. Collect data from representative biological and environmental samples using routine test procedures.
- 2. Utilize natural resources equipment and technology to accurately identify ecosystem components for purposes of conserving and managing natural resources.
- 3. Apply the basic concepts of science to natural resource conservation and management.
- 4. Conduct natural environment assessments according to standard field survey methods, including the use of appropriate equipment and materials.
- 5. Recommend eco-site conservation and management strategies through the classification of ecosystem components.
- 6. Practice principles and ethics associated with natural resource conservation and management issues.
- 7. Work safely in adherence to occupational health and safety standards.
- 8. Complete all work in compliance with applicable municipal, provincial and federal standards and guidelines.
- 9. Contribute to the implementation of natural resource conservation and management.
- 10. Perform basic project management support techniques.
- 11. Communicate technical information accurately and effectively in oral, written and visual forms.
- 12. Travel accurately in a timely manner in the outdoors using appropriate navigation aids and motorized transport equipment.
- 13. Apply awareness of global environmental issues to conservation and management of natural resources.

# **ADMISSIONS**

# MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 College English (C) ENG4C, or mature student status.

# **CAREER PATHS**

The knowledge and skills gained in this program make graduates ideal candidates for jobs in any natural environment field including federal and provincial field research. Career paths for graduates could include employment with Conservation Authorities, Ontario Ministry of Natural Resources and Forestry, Ducks Unlimited, Department of Fisheries & Oceans, Natural Resources Canada, private environmental consulting firms, renewable energy site development companies, natural resource contracting companies, and the forest industry.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,975.80	\$1,534.00	\$15,463.10	\$1,994.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

This is a co-operative education program. Students are required to complete at least one co-op work placement (CWF100) in order to graduate.

For more information contact Program Coordinators Brian Anstess; 705-759-2554 Ext: 2461; <u>Brian.Anstess@saultcollege.ca</u>; or Ryan Namespetra; 705-759-2554 Ext: 2853; <u>Ryan.Namespetra@saultcollege.ca</u>.

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

CMM115-3 Communications I NET100-3 Fish and Wildlife Studies I NET107-3 Outdoor Equipment Certifications NRT101-3 Trees and Shrubs I NRT123-3 Outdoor Navigation NRT131-2 Fall Field Camp - First Year NRT141-3 Science and Nature NRT150-4 Forest Inventory

# **SEMESTER 2**

CMM210-3 Technical Communication CWF100-3 Co-op Work Placement I Note: CWF100-3 is mandatory and takes place in the summer. NET105-3 Fish and Wildlife Studies II NET108-4 Geographic Information Systems NET150-2 Data Analysis & Presentation NRT109-3 Ecology NRT116-2 Natural Resources Career Management NRT133-3 Trees and Shrubs II NET152-3 Traditional Ecological Knowledge

# **SEMESTER 3**

NET200-3 Aquatic Ecosystem Surveys NET201-2 Second Year Fall Field Camp NET207-3 Naturalizing Urban Environments NET210-3 Wetland Conservation NET252-3 Forest Practices and the Environment NRT256-3 Ecosystem Classification NRT257-3 Introduction to Soil Science GEN100-3 Global Citizenship

# **SEMESTER 4**

NET102-2 Global Environmental Issues NET204-3 Remote Sensing NET205-4 Terrestrial Ecosystem Surveys NET250-3 General Entomology NET255-4 Environmental Monitoring NET256-2 Reneweable Energy/Site Development NRT240-2 Natural Resources Law

#### Select one of the following:

*GEN110: Student Selected General Education* **Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

# **Course Descriptions**

# Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Fish and Wildlife Studies I (NET100) (3 credits)

This course concentrates on fundamental aspects of anatomy, physiology, and ecology of Ontario birds, Ontario Turtles, Ontario Snakes and Ontario Amphibian species. Lab sessions will develop skills in identification and classification, as well provide knowledge and experience with commonly used field inventory techniques.

# Outdoor Equipment Certifications (NET107) (3 credits)

Students will demonstrate the proper mixing of fuel, retrieve and maintain field equipment, demonstrate safe trailer operation and successfully complete the Canada Safety Council ATV Safe Rider course, and the Sault College Chainsaw and Brush saw courses.

#### Trees and Shrubs I (NRT101) (3 credits)

This course will provide a systematic study of structural characteristics of trees and shrubs, the identification of Canadian species by leaf features, their relationships to one another and recognition of their dynamic role in forest ecology. Coniferous species will be studied in considerable detail including twig, bark and growth characteristics.

# Outdoor Navigation (NRT123) (3 credits)

Students will gain skills in orienteering and navigating in forested areas using a magnetic hand compass, topographic maps (OBM, NTS), OMNR standard aerial photographs and global positioning systems (GPS). Students will use a navigational protractor, metric scale, and digital planimeter in the planning and presentation of field exercises. Pacing and distance measurement devices (50 m rope, 30 m tape, Hip-Chain) will be used to measure distances in a team environment. Calculations of distance, area and pacing factors will be covered.

# Fall Field Camp - First Year (NRT131) (2 credits)

A one week period in the fall will provide the new student with practical outdoor natural resource related

skills including watercraft handling, compassing, tree identification and hand tool and power tool maintenance use.

# Science and Nature (NRT141) (3 credits)

This course examines six topics of science that are fundamental to an understanding of the role of research and the relationship of biology and chemical interaction to natural resource management. Topics include the Science and the Scientific Method, Systems in Nature, The Species in an Evolutionary Context, The Cell as the Fundamental Unit of Life, Water as a Medium for Life, and Chemical Interactions in the Environment.

# Forest Inventory (NRT150) (4 credits)

This is a foundational course which introduces students to the techniques and instruments used in forest inventory field measurements. Applicable software will be used in the analysis of field data.

# Semester 2

# Technical Communication (CMM210) (3 credits)

This course provides training in technical communication. Emphasis is given to memos, letters, forms, and reports. Oral reporting and its importance on the job are also included. The effective use of computers to research and generate technical documents is an essential component of this course. The theory of writing is taught through the writing process.

# Co-op Work Placement I (CWF100) (3 credits)

The student will acquire natural resources work experience in various areas of natural resources. Particular emphasis will be placed on the importance of interpersonal, teamwork, technical, and leadership skills as they meet the daily challenges of a dynamic workplace environment.

# Fish and Wildlife Studies II (NET105) (3 credits)

Students will learn to identify, discuss life cycles and interpretive value of selected freshwater fishes and mammals.. Common wildlife species will be identified by their tracks & signs, scat, fur and skull. Field surveys will be conducted to assess wildlife habitat.

# Geographic Information Systems (NET108) (4 credits)

The aim of this course is to introduce students to the use of Geographic Information Systems (GIS) as a source of immediate information and as an analytic tool for solving natural resource management problems. Students will be using ESRI's ArcGIS software.

# Data Analysis & Presentation (NET150) (2 credits)

Presenting and analyzing scientific data in both tabular and chart form.

# Ecology (NRT109) (3 credits)

This is an introductory course to provide students with an understanding of ecology as it relates to people who work with renewable resources. The course covers a wide range of topics that examine the interactions between plants and animals and their physical environment. A combination of lectures, labs and field surveys provide insight into the structure and function of ecosystems in general; but emphasize forest and freshwater aquatic ecosystems in Canada.

# Natural Resources Career Management (NRT116) (2 credits)

This course will provide the student with the skills, tools and knowledge necessary to develop and manage their careers in the Natural Resources Field. This course will include researching Natural Resources employers, how and when to apply to Natural Resources employers, trends in Natural Resources employment areas, what Natural Resources employers like and don't like in a resume, interview tips for Natural Resources employment in Natural Resources, planning your career in Natural Resources, teamwork and interpersonal skills used in Natural Resources, the importance

of attitude in career development and the preparation of the student for the CWF100 Co-op Work Term Placement.

# Trees and Shrubs II (NRT133) (3 credits)

Students will gain the skill of winter identification of major tree and shrub species that are representative of the forest regions and urban areas of Ontario. Students will also identify dwarf woody plants and herbs commonly found in Ontario woodlands. The silvics of tree species and the ecology of plant associations will be studied to complement the identification of tree, shrub and herbaceous plant species.

# Traditional Ecological Knowledge (NET152) (3 credits)

Indigenous peoples of Canada have various dynamic and diverse cultures that reflect a tightly-woven connection between the environment and identity, lifestyles and values. Traditional Ecological Knowledge, TEK, results from thousands of years of intimate knowledge of the environment shared by generations of Indigenous peoples around the world. Students will explore TEK through traditional stories from regions across the country, recognizing that TEK is specific to local ecosystems, and be exposed to a holistic framework to respectfully understand Indigenous knowledge systems. Various Canadian Indigenous cultures and pre and post contact histories will create connections between the environment and human values to better understand historical and current issues. This course meets the General Education Theme #3, Social and Cultural Understanding.

# Semester 3

# Aquatic Ecosystem Surveys (NET200) (3 credits)

Stream surveys will be conducted to assess ecosystem condition. Lake survey data will be interpreted including lake bathymetry. Students will conduct creel surveys as well as collecting and identifying 20 freshwater invertebrates.

# Second Year Fall Field Camp (NET201) (2 credits)

Students will gain hands-on field skills by working in groups to complete a variety of aquatic and terrestrial related activities. While in the field, students will conduct a lake survey, assess stream channel morphology, sample aquatic invertebrates, and conduct wildlife assessment surveys. Emphasis will be placed on developing field skills desired by potential natural resources related employers. Evening activities will aim to further develop the students appreciation for the natural environment through guest speakers and a wildlife tour.

# Naturalizing Urban Environments (NET207) (3 credits)

This course will look at green space management in urban settings in an attempt to reconnect people to nature. Included are street tree inventory, wildlife management in urban centres and the use and promotion of native plants.

# Wetland Conservation (NET210) (3 credits)

This course provides the biological background for management of wetland habitats, emphasizing aquatic community component identification, biology and management. Students will learn how to evaluate wetlands, assess their limitations, and research and design a plan for their enhancement to optimize recreational, social, aesthetic and economic values.

# Forest Practices and the Environment (NET252) (3 credits)

Students are provided with an overview of the characteristics of the forests of Ontario and forest management processes including planning, access, harvest, maintenance and renewal. The focus of the course will be on environmental considerations of forest practices to mitigate damage to ecosystem function.

# Ecosystem Classification (NRT256) (3 credits)

Ecosystem classification is a survey of natural aquatic and terrestrial ecosystems and associated plant communities found in central Ontario. A wide variety of plants will be identified. Emphasis will be placed on using plants for the classification of forest and wetland ecosystems using ecological classification systems designed for use in the local area.

# Introduction to Soil Science (NRT257) (3 credits)

This forest soils course highlights the relationships between landforms, geology, soils and forest ecosystems. The course covers landform origin, description and identification, soil profile development and soil classification and the fundamentals of the physical and chemical properties of forest soils. Students complete a major project comparing and contrasting the biophysical elements of two different eco-sites.

# Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Semester 4

# Global Environmental Issues (NET102) (2 credits)

Current global issues including, climate change, terrorism, poverty, freshwater supply, gas & oil supplies, and renewable energy will be major topics considered. Discussions around human and non-human environmental impacts will take place with regards to invasive species, pandemics, over fishing, pollution, agricultural practices and excessive life styles.

# Remote Sensing (NET204) (3 credits)

This course studies target energy interactions recorded by aerial & satellite remote sensing platforms.? Photogrammetric measurements using both hardcopy and softcopy images will be applied including displacement & scale calculations, areas, heights and distances.? Remote sensing principles such as resolution types will be discussed.? The digital aerial photography system currently used by the Ontario Ministry of Natural Resources will be presented to students.

# Terrestrial Ecosystem Surveys (NET205) (4 credits)

Perform various terrestrial surveys and calculate sampling intensity, sample area and number of plots required. Students will use conventional tally sheets as well as PDA's and data loggers to carry out these surveys. Statistical analysis and conclusions will be summarized in technical report format.

# General Entomology (NET250) (3 credits)

Students will demonstrate the ability to identify and classify aquatic and terrestrial insects of environmental importance and demonstrate knowledge of ecological values and problems associated with insects.

# Environmental Monitoring (NET255) (4 credits)

This course will discuss types, sources and effects of pollutants on natural ecosystems through lectures, projects and lab experiments.

# Reneweable Energy/Site Development (NET256) (2 credits)

Students will explore current perspectives on forms of renewable energy and understand the process required in developing wind, water, solar, biomass, geothermal and other renewable energy sources for utilization.

# Natural Resources Law (NRT240) (2 credits)

This course will acquaint natural resource students with pertinent issues in the Canadian and Ontario justice systems and enforcement procedures. Students will be required to have a working knowledge of the content and significance of legislation related to natural resource use. A section will be devoted to aboriginal rights related to natural resources. Compliance monitoring and enforcement protocols will be emphasized.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Natural Environment Technologist -Conservation and Management

Section B.131 6/2/2020

**Ontario College Advanced Diploma (3 Years - 6 Semesters ) (5221)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

This advanced diploma expands on courses taken as part of the two year Natural Environment Technician curriculum. The Technologist designation earned through a third year of study takes learning to a new level. Students will participate in a number of legacy field projects related to Conservation and Management of natural resources. Study layout, data collection, analysis and reporting are the overriding elements of courses taught within this program. Students will hone their problem solving skills and work independently on unique projects in aquatic ecosystems, species at risk, invasive species and climate change.

Students will have the opportunity to work with a variety of related agencies through a field placement and legacy projects. This chance to network facilitates important industry connections and allows for real life contributions to natural resource management. Integration of technology is a crucial component, as GIS applications and other relevant software are fundamental to the third year. All of this is presented within a strong framework of sustainability, creating a foundation for an impactful career working in and with the Natural Environment.

#### **PROGRAM OUTCOMES**

# A graduate of the Natural Environment Technologist Conservation and Management Program at Sault College will reliably demonstrate the ability to:

- 1. collect, analyze, interpret and report on data from representative biological and environmental samples.
- 2. utilize natural resources information technology equipment to assemble, analyze and present identified ecosystem components for purposes of conserving and managing natural resources.
- 3. apply the basic concepts of science to natural resource conservation and management.
- 4. plan, design, implement and participate in the maintenance of natural environment assessments.
- 5. apply eco-site conservation and management principles
- 6. practice principles and ethics associated with natural resource conservation and management issues.
- 7. ensure all work is safely completed in adherence to occupational health and safety standards.
- 8. contribute to the development, implementation and maintenance of environmental management systems.
- 9. provide ongoing support for project management.
- 10. communicate technical information accurately and effectively in oral, written, visual and electronic forms.
- 11. develop and present strategies for ongoing personal and professional development to enhance performance as an environmental technologist.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 College English (C) ENG4C, or mature student status.

# **CAREER PATHS**

Employers continually seek motivated, disciplined and qualified field personnel for positions which involve accessing wilderness areas, conducting surveys and writing of technical reports summarizing results. Students of this advanced diploma program are both capable in the field as well as in an office setting. Graduates can acquire employment with national and provincial natural resource agencies, Conservation Authorities, or regional stewardship councils and have increased opportunities to work for renewable energy site development companies and private environmental consulting firms. Positions can also be acquired internationally.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,975.80	\$1,534.00	\$15,463.10	\$1,994.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

This is a Co-operative Education Program. September and January Intakes are available for this program. Please contact the Registrar's Office for further information.

This is a co-operative education program. Students are required to complete at least one co-op work placement (CWF100) in order to graduate.

For more information contact Program Coordinators Brian Anstess at 705-759-2554 Ext: 2461; Brian.Anstess@saultcollege.ca or Ryan Namespetra at 705-759-2554 Ext: 2853; Ryan.Namespetra@saultcollege.ca.

# **PROGRAM OF STUDY**

# **SEMESTER 1**

CMM115-3 Communications I NET100-3 Fish and Wildlife Studies I NET107-3 Outdoor Equipment Certifications NRT101-3 Trees and Shrubs I NRT123-3 Outdoor Navigation NRT131-2 Fall Field Camp - First Year NRT141-3 Science and Nature NRT150-4 Forest Inventory

# **SEMESTER 2**

CMM210-3 Technical Communication CWF100-3 Co-op Work Placement I Note: CWF100-3 is mandatory and takes place in the summer. NET105-3 Fish and Wildlife Studies II NET108-4 Geographic Information Systems NET150-2 Data Analysis & Presentation NRT109-3 Ecology NRT116-2 Natural Resources Career Management NRT133-3 Trees and Shrubs II NET152-3 Traditional Ecological Knowledge

# **SEMESTER 3**

NET200-3 Aquatic Ecosystem Surveys NET201-2 Second Year Fall Field Camp NET207-3 Naturalizing Urban Environments NET210-3 Wetland Conservation NET252-3 Forest Practices and the Environment NRT256-3 Ecosystem Classification NRT257-3 Introduction to Soil Science GEN100-3 Global Citizenship

# **SEMESTER 4**

NET102-2 Global Environmental Issues NET204-3 Remote Sensing NET205-4 Terrestrial Ecosystem Surveys NET250-3 General Entomology NET255-4 Environmental Monitoring NET256-2 Reneweable Energy/Site Development NRT240-2 Natural Resources Law

# Select one of the following:

GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

#### **SEMESTER 5**

NET302-3 Invasive Species Management NET312-2 Environmental Assessment - Policy and Implementation NET315-3 Species at Risk Management NET316-2 Applied GIS NET317-2 Fall Field Exercises NET320-6 Ecosystem Studies NRT302-2 Field Investigative Techniques

# **SEMESTER 6**

NET305-3 Source Water Protection NET309-3 Conservation, Law and Compliance NET350-3 Mining Practices & the Environment NET356-2 Applied Environmental Assessment NET357-3 Computer Applications NET358-3 Independent Study

# **Course Descriptions**

#### Semester 1

#### Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

#### Fish and Wildlife Studies I (NET100) (3 credits)

This course concentrates on fundamental aspects of anatomy, physiology, and ecology of Ontario birds, Ontario Turtles, Ontario Snakes and Ontario Amphibian species. Lab sessions will develop skills in identification and classification, as well provide knowledge and experience with commonly used field inventory techniques.

# Outdoor Equipment Certifications (NET107) (3 credits)

Students will demonstrate the proper mixing of fuel, retrieve and maintain field equipment, demonstrate safe trailer operation and successfully complete the Canada Safety Council ATV Safe Rider course, and the Sault College Chainsaw and Brush saw courses.

#### Trees and Shrubs I (NRT101) (3 credits)

This course will provide a systematic study of structural characteristics of trees and shrubs, the identification of Canadian species by leaf features, their relationships to one another and recognition of their dynamic role in forest ecology. Coniferous species will be studied in considerable detail including twig, bark and growth characteristics.

#### Outdoor Navigation (NRT123) (3 credits)

Students will gain skills in orienteering and navigating in forested areas using a magnetic hand compass, topographic maps (OBM, NTS), OMNR standard aerial photographs and global positioning systems (GPS). Students will use a navigational protractor, metric scale, and digital planimeter in the planning and presentation of field exercises. Pacing and distance measurement devices (50 m rope, 30 m tape, Hip-Chain) will be used to measure distances in a team environment. Calculations of distance, area and pacing factors will be covered.

# Fall Field Camp - First Year (NRT131) (2 credits)

A one week period in the fall will provide the new student with practical outdoor natural resource related skills including watercraft handling, compassing, tree identification and hand tool and power tool maintenance use.

#### Science and Nature (NRT141) (3 credits)

This course examines six topics of science that are fundamental to an understanding of the role of research and the relationship of biology and chemical interaction to natural resource management. Topics include the Science and the Scientific Method, Systems in Nature, The Species in an Evolutionary Context, The Cell as the Fundamental Unit of Life, Water as a Medium for Life, and Chemical Interactions in the Environment.

#### Forest Inventory (NRT150) (4 credits)

This is a foundational course which introduces students to the techniques and instruments used in forest inventory field measurements. Applicable software will be used in the analysis of field data.

#### Semester 2

# Technical Communication (CMM210) (3 credits)

This course provides training in technical communication. Emphasis is given to memos, letters, forms, and reports. Oral reporting and its importance on the job are also included. The effective use of computers to research and generate technical documents is an essential component of this course. The theory of writing is taught through the writing process.

# Co-op Work Placement I (CWF100) (3 credits)

The student will acquire natural resources work experience in various areas of natural resources. Particular emphasis will be placed on the importance of interpersonal, teamwork, technical, and leadership skills as they meet the daily challenges of a dynamic workplace environment.

# Fish and Wildlife Studies II (NET105) (3 credits)

Students will learn to identify, discuss life cycles and interpretive value of selected freshwater fishes and mammals.. Common wildlife species will be identified by their tracks & signs, scat, fur and skull. Field surveys will be conducted to assess wildlife habitat.

# Geographic Information Systems (NET108) (4 credits)

The aim of this course is to introduce students to the use of Geographic Information Systems (GIS) as a source of immediate information and as an analytic tool for solving natural resource management problems. Students will be using ESRI's ArcGIS software.

# Data Analysis & Presentation (NET150) (2 credits)

Presenting and analyzing scientific data in both tabular and chart form.

# Ecology (NRT109) (3 credits)

This is an introductory course to provide students with an understanding of ecology as it relates to people who work with renewable resources. The course covers a wide range of topics that examine the interactions between plants and animals and their physical environment. A combination of lectures, labs and field surveys provide insight into the structure and function of ecosystems in general; but emphasize forest and freshwater aquatic ecosystems in Canada.

# Natural Resources Career Management (NRT116) (2 credits)

This course will provide the student with the skills, tools and knowledge necessary to develop and manage their careers in the Natural Resources Field. This course will include researching Natural Resources employers, how and when to apply to Natural Resources employers, trends in Natural Resources employment areas, what Natural Resources employers like and don't like in a resume, interview tips for Natural Resources employment in Natural Resources, planning your career in Natural Resources, teamwork and interpersonal skills used in Natural Resources, the importance of attitude in career development and the preparation of the student for the CWF100 Co-op Work Term Placement.

# Trees and Shrubs II (NRT133) (3 credits)

Students will gain the skill of winter identification of major tree and shrub species that are representative of the forest regions and urban areas of Ontario. Students will also identify dwarf woody plants and herbs commonly found in Ontario woodlands. The silvics of tree species and the ecology of plant associations will be studied to complement the identification of tree, shrub and herbaceous plant species.

# Traditional Ecological Knowledge (NET152) (3 credits)

Indigenous peoples of Canada have various dynamic and diverse cultures that reflect a tightly-woven connection between the environment and identity, lifestyles and values. Traditional Ecological Knowledge, TEK, results from thousands of years of intimate knowledge of the environment shared by generations of Indigenous peoples around the world. Students will explore TEK through traditional stories from regions across the country, recognizing that TEK is specific to local ecosystems, and be exposed to a holistic

framework to respectfully understand Indigenous knowledge systems. Various Canadian Indigenous cultures and pre and post contact histories will create connections between the environment and human values to better understand historical and current issues. This course meets the General Education Theme #3, Social and Cultural Understanding.

# Semester 3

# Aquatic Ecosystem Surveys (NET200) (3 credits)

Stream surveys will be conducted to assess ecosystem condition. Lake survey data will be interpreted including lake bathymetry. Students will conduct creel surveys as well as collecting and identifying 20 freshwater invertebrates.

# Second Year Fall Field Camp (NET201) (2 credits)

Students will gain hands-on field skills by working in groups to complete a variety of aquatic and terrestrial related activities. While in the field, students will conduct a lake survey, assess stream channel morphology, sample aquatic invertebrates, and conduct wildlife assessment surveys. Emphasis will be placed on developing field skills desired by potential natural resources related employers. Evening activities will aim to further develop the students appreciation for the natural environment through guest speakers and a wildlife tour.

# Naturalizing Urban Environments (NET207) (3 credits)

This course will look at green space management in urban settings in an attempt to reconnect people to nature. Included are street tree inventory, wildlife management in urban centres and the use and promotion of native plants.

# Wetland Conservation (NET210) (3 credits)

This course provides the biological background for management of wetland habitats, emphasizing aquatic community component identification, biology and management. Students will learn how to evaluate wetlands, assess their limitations, and research and design a plan for their enhancement to optimize recreational, social, aesthetic and economic values.

# Forest Practices and the Environment (NET252) (3 credits)

Students are provided with an overview of the characteristics of the forests of Ontario and forest management processes including planning, access, harvest, maintenance and renewal. The focus of the course will be on environmental considerations of forest practices to mitigate damage to ecosystem function.

# Ecosystem Classification (NRT256) (3 credits)

Ecosystem classification is a survey of natural aquatic and terrestrial ecosystems and associated plant communities found in central Ontario. A wide variety of plants will be identified. Emphasis will be placed on using plants for the classification of forest and wetland ecosystems using ecological classification systems designed for use in the local area.

# Introduction to Soil Science (NRT257) (3 credits)

This forest soils course highlights the relationships between landforms, geology, soils and forest ecosystems. The course covers landform origin, description and identification, soil profile development and soil classification and the fundamentals of the physical and chemical properties of forest soils. Students complete a major project comparing and contrasting the biophysical elements of two different eco-sites.

# Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a

socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Semester 4

# Global Environmental Issues (NET102) (2 credits)

Current global issues including, climate change, terrorism, poverty, freshwater supply, gas & oil supplies, and renewable energy will be major topics considered. Discussions around human and non-human environmental impacts will take place with regards to invasive species, pandemics, over fishing, pollution, agricultural practices and excessive life styles.

# Remote Sensing (NET204) (3 credits)

This course studies target energy interactions recorded by aerial & satellite remote sensing platforms.? Photogrammetric measurements using both hardcopy and softcopy images will be applied including displacement & scale calculations, areas, heights and distances.? Remote sensing principles such as resolution types will be discussed.? The digital aerial photography system currently used by the Ontario Ministry of Natural Resources will be presented to students.

# Terrestrial Ecosystem Surveys (NET205) (4 credits)

Perform various terrestrial surveys and calculate sampling intensity, sample area and number of plots required. Students will use conventional tally sheets as well as PDA's and data loggers to carry out these surveys. Statistical analysis and conclusions will be summarized in technical report format.

# General Entomology (NET250) (3 credits)

Students will demonstrate the ability to identify and classify aquatic and terrestrial insects of environmental importance and demonstrate knowledge of ecological values and problems associated with insects.

# Environmental Monitoring (NET255) (4 credits)

This course will discuss types, sources and effects of pollutants on natural ecosystems through lectures, projects and lab experiments.

# Reneweable Energy/Site Development (NET256) (2 credits)

Students will explore current perspectives on forms of renewable energy and understand the process required in developing wind, water, solar, biomass, geothermal and other renewable energy sources for utilization.

# Natural Resources Law (NRT240) (2 credits)

This course will acquaint natural resource students with pertinent issues in the Canadian and Ontario justice systems and enforcement procedures. Students will be required to have a working knowledge of the content and significance of legislation related to natural resource use. A section will be devoted to aboriginal rights related to natural resources. Compliance monitoring and enforcement protocols will be emphasized.

# Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

# Semester 5

Invasive Species Management (NET302) (3 credits)

Topics in this course will include modes of introduction, impacts of invasive species to native species, communities, ecology and biodiversity, preventative measures to mitigate transfer of invasive species, eradication methodologies, habitat rehabilitation methodologies and legislation dealing with alien species introduction.

# Environmental Assessment - Policy and Implementation (NET312) (2 credits)

This course provides an overview of the environmental assessment process, the various acts, regulations, agencies and authorities involved.

# Species at Risk Management (NET315) (3 credits)

This course will focus on the initiation of field projects to management of Ontario's endangered flora and fauna. Students will develop and implement recovery plans for species at risk.

# Applied GIS (NET316) (2 credits)

This course uses introductory GIS skills obtained in the previous year and develops more skills to support the management of project data in semester five.

# Fall Field Exercises (NET317) (2 credits)

This course is composed of four days of outdoor activities to take place in a field setting. Each student team will be required to plan and set up a backcountry campsite and conduct a detailed ecosystem inventory of a selected natural area. Emphasis will be placed on cooperative performance and research quality data collection and recording.

# Ecosystem Studies (NET320) (6 credits)

This project based, experiential course will focus on the collection, analysis and management of aquatic and terrestrial data collected through various field surveys. The course contains a series of modules that are designed to give the student exposure to a diverse range of survey techniques related to aquatic and terrestrial ecosystems. Surveys and data collection will be associated with industry partners as well as in-house legacy projects.

# Field Investigative Techniques (NRT302) (2 credits)

This course consists of a series of topics that are designed to give the student exposure to a range of modern field equipment and research techniques. Most techniques involve data collection for resource management and research. Topics have been chosen that represent a variety of natural resource program areas. Data collection techniques, analysis and report writing will be emphasized.

# Semester 6

# Source Water Protection (NET305) (3 credits)

Students will define and delineate watersheds, categorize various types of source water, identify point and non-point threats to source water, and be able to discuss current and predicted global water demands and threats. The role of federal, provincial and municipal agencies and the laws and regulations governing water protection and wastewater treatment will be covered. Students will complete water related laboratory analyses.

# Conservation, Law and Compliance (NET309) (3 credits)

This course will expand on previous studies of major statutes, regulations and policy. Students will learn enforcement techniques for compliance monitoring, investigating offences, collecting evidence, and laying charges for Provincial and Federal violations. The role of negotiating skills and conflict resolution in resource management will be emphasized. Methods of instruction will include role playing, case studies, scenarios and guest speakers.

# Mining Practices & the Environment (NET350) (3 credits)

This course will give students an overview of geological processes and the formation of mineral and petroleum resources. Surface and sub-surface mining techniques to extract non-renewable resources will be discussed generally as well as their effect on the environment. The focus of the course will be on environmental considerations of mineral extraction to mitigate environmental impact.

# Applied Environmental Assessment (NET356) (2 credits)

Using the knowledge from the past semester and new information in this semester, students will undertake a hands-on environmental assessment project.

# Computer Applications (NET357) (3 credits)

This course provides GIS and applicable software to support the analysis of data for the Independent Study.

# Independent Study (NET358) (3 credits)

Students will research, compile and analyse data and write a technical report on a topic of interest under the guidance of a faculty member. Each student group will present their findings to their peers and faculty near the conclusion of semester six. A grant writing component for funding for research projects is included.

# Natural Resource/Environmental Law - Inspection and Enforcement

Section B.132 6/2/2020

**Ontario College Graduate Certificate (1 Year - 2 Semesters ) (5006)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

Students who enrol in this Ontario College Graduate Certificate program will gain knowledge, expertise and professional skills relating to investigations and law enforcement relating to natural resource and environmental law. Emphasis will be placed on the legal aspects and procedures of inspection, and enforcement.

This graduate certificate program will prepare students to enter the profession of natural resource and/ or environmental law compliance monitoring and enforcement as inspectors, investigators, enforcement officers, conservation officers, and private industry/corporate environmental officers.

# **PROGRAM OUTCOMES**

# A graduate of the Sault College Natural Resources/Environmental Law Program will reliably demonstrate the ability to:

- 1. Extend the Resource Technician's knowledge into the field of Natural Resource and Recreational Law; local, national and international.
- 2. Introduce the student to the Canadian System of Justice as it relates to Natural Resources and Recreation.
- 3. Familiarize the student with the history of Law Enforcement.
- 4. Familiarize the student with the more common violations encountered by the Conservation Officer, the Deputy Conservation Officer, the Park Warden, and Inspector, by using interpretation of the legislation and its intent using modules, sequential analysis and case study.
- 5. Instruct the student in the power of arrest, search and seizure under the various statutes.
- 6. Familiarize the student with the laws of evidence and judicial procedures.
- 7. Provide instruction on the proper use of legal documents, the proper techniques used while investigating a common type of offence, the keeping of proper notes, collecting and preserving of evidence and the preparation of crown briefs.
- 8. Prepare the student for the final step in a prosecution.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Completion of a 2-year diploma, advanced diploma or degree.

# **CAREER PATHS**

This graduate certificate program will prepare students to enter the profession of natural resource and/or

environmental law compliance monitoring and enforcement as inspectors, investigators, enforcement officers, conservation officers, fisheries officers, park wardens and private industry/corporate environmental officers.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$4,463.10	\$1,289.00	\$15,899.40	\$1,749.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

For more information please contact the Program Coordinators Brian Anstess and Ryan Namespetra at:

Brian.Anstess@saultcollege.ca 705-759-2554 Ext: 2461

Ryan.Namespetra@saultcollege.ca 705-759-2554 Ext: 2853

# **PROGRAM OF STUDY**

#### **SEMESTER 1**

NRL100-3 Foundations of Jurisprudence NRL105-3 Interviewing and Introduction to Case Management NRL115-2 Natural Resources Law Fall Field Camp NRL120-3 Federal Legislation - Natural Resources NRL130-3 Provincial Legislation - Natural Resources NRL150-3 Federal/Provincial Legislation - Environment PFP301-3 Criminal and Civil Law

# **SEMESTER 2**

NRL200-3 Advanced Jurisprudence NRL210-3 Introduction to Applied Forensic Science NRL220-3 Inspection and Compliance NRL230-3 Advanced Legal Process NRL250-3 Enforcement Officer Powers NRL260-4 Conflict Management and Personal Safety PFP106-3 Principles of Ethical Reasoning

# **Course Descriptions**

# Semester 1

# Foundations of Jurisprudence (NRL100) (3 credits)

This course deals with the broad fundamentals of the Canadian legal system. It is also designed to help the student develop research and analysis skills required to locate, interpret, and apply statutory, regulatory

and case law.

#### Interviewing and Introduction to Case Management (NRL105) (3 credits)

This course focuses on the interviewing and investigation skills necessary to retrieve information from victims, witnesses and suspects using legally accepted techniques. Indicators of deception and potential violence will be discussed. Rules of competence and compellability contained in the Canada Evidence Act will also be examined.? The Charter of Rights and Freedoms will be examined highlighting the obligations placed upon a person in authority.? Students will also learn the basic steps of conducting an investigation including the practical development of note taking and observation skills.

#### Natural Resources Law Fall Field Camp (NRL115) (2 credits)

Students will develop fundamental field skills related to enforcement and investigation in the natural resources field. Practical scenario based activities will give students the opportunity to experience real world situations. Field activities will also allow for networking with local enforcement, inspection and compliance representatives.

#### Federal Legislation - Natural Resources (NRL120) (3 credits)

This course leads students through an in-depth review of federal acts and regulations pertaining to natural resources and parks. Students will learn how to locate, interpret and analyze various federal acts, regulations and cases.

#### Provincial Legislation - Natural Resources (NRL130) (3 credits)

This course leads students through an in-depth review of provincial acts and regulations pertaining to natural resources and parks. Students will learn how to locate, interpret and analyze various provincial acts, regulations, and cases.

# Federal/Provincial Legislation - Environment (NRL150) (3 credits)

This course leads students through an in-depth review of provincial and federal environmental acts and regulations. Students will learn how to locate, interpret and analyze various provincial and federal acts, regulations and cases.

#### Criminal and Civil Law (PFP301) (3 credits)

This course deals with the fundamentals of criminal law, including: analyzing the elements of an offence, classification of offences, and the identification of defenses used in criminal cases. The course will also introduce the student to the rights of citizens in contracts, landlord and tenant situations, labour, and family law. Charter implications, as well as liability under tort law, will be reviewed and discussed. It is also designed to help the student develop research and analysis skills so that they can locate, interpret, and apply both statute and case law to investigations.

#### Semester 2

# Advanced Jurisprudence (NRL200) (3 credits)

This course builds on the Foundations of Jurisprudence and leads students through a more in-depth look into decisions rendered involving natural resources and environmental statutory, regulatory and case law and decisions. Students will learn about contemporary trends and patterns in emerging legislation, penalties and sanctions.

#### Introduction to Applied Forensic Science (NRL210) (3 credits)

This course will examine the requirements of a continuing investigation, the use of forensics, and the care

and handling of evidence. The collection and presentation of forensic evidence and related issues in a court of law will also be reviewed.

# Inspection and Compliance (NRL220) (3 credits)

This course focuses specifically on inspection and compliance monitoring sections of Provincial and Federal legislation, and includes topics relating to designing an inspection and compliance plan, choosing appropriate sampling techniques and deciding on documentation requirements. The application of recent due diligence court decisions will be analyzed both from a government, First Nations and private industry perspective.

# Advanced Legal Process (NRL230) (3 credits)

In this course, students will be required to conduct a mock investigation prepare a crown brief, and present a case in a court simulation.

# Enforcement Officer Powers (NRL250) (3 credits)

This course will examine pertinent sections of the Canadian Charter of Rights and Freedoms and their impact on Canadian law enforcement procedure. Citizen and police arrest and release authorities, police powers of search and seizure, with and without warrant, and the use and implications of enforcement officer discretion will be the main themes of the course. The student will become familiar with enforcement officer terminology and with the documentation required to affect arrest and release.

# Conflict Management and Personal Safety (NRL260) (4 credits)

This course is designed to foster confidence and competence when dealing with potentially violent situations. The student learns to recognize behavioural responses to crisis and to respond with non-violent conflict resolutions through verbal and non-verbal intervention. Interpersonal and group dynamics, problem solving, and adaptive skills as they relate to conflict resolution and mediation will be explored.

# Principles of Ethical Reasoning (PFP106) (3 credits)

This course focuses upon ethical issues and dilemmas faced by individuals as citizens and as professionals. It helps students to clarify their values and establish a framework for ethical decision making. Ethical issues of a general nature, which relate to a wide variety of concerns are examined. The student will investigate the ethical codes of their chosen vocation and apply ethical analysis models to dilemmas which typify those often encountered in the profession.

# **Construction Techniques**

**Ontario College Certificate (1 Year - 2 Semesters ) (4098)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



# **PROGRAM OVERVIEW**

The Construction Techniques program is designed to provide you with the skills and knowledge needed to pursue employment in the construction sector after only 8 months. Learn how to build and perform basic carpentry work, work safely on construction sites, perform concrete and form work, conduct surveys and estimates, and even how to create lay-outs and read blueprints. As an option, you may succeed in securing an apprenticeship after graduating from the program and be able to reinforce and expand on the skills you have learned through hands-on experiences alongside a qualified tradesperson.

# **PROGRAM OUTCOMES**

# A graduate of the ConstructionTechniques Program at Sault College will reliably demonstrate the ability to:

- 1. Interpret detailed dimensional drawings and prepare construction documents using computer assisted drafting software.
- 2. Describe and demonstrate methods and procedures for the use of hand, power, and stationary tools and equipment according to industry standards of practice.
- 3. Adhere to applicable health and safety related legislation and practices.
- 4. Describe and demonstrate methods and procedures required for form setting and the placement and testing of concrete according to industry standards of practice.
- 5. Describe and demonstrate methods and procedures required for scaffold erection and dismantlement according to industry standards of practice.
- 6. Describe earthwork, barrier, and environmental control practices and procedures according to industry standards of practice.
- 7. Describe and demonstrate the methods and procedures required for rigging and hoisting operations according to industry standards of practice.
- 8. Assist in preparing construction specifications, material and cost estimates.
- 9. Demonstrate recognition for the necessity and value of life-long learning in the field.
- 10. Apply sound environmental practices and policies in civil engineering and construction projects.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C and Grade 11 Foundations for College Math (C) MBF3C or mature student status.

# **CAREER PATHS**

Graduates of this certificate program can work in entry-level positions in almost every sector of the construction industry. They can be employed on a project-by-project basis or work for a construction company. Small, medium and large companies, unionized and non-unionized, all employ construction/carpentry workers on a variety of projects in the residential, commerical and industrial

sectors.

#### **ConstructionTechniques graduates:**

- Frame residential houses
- Perform renovation and maintenance carpentry
- Install roofing, insulation and exterior siding
- Read blueprints
- Prepare, excavate, backfill, compact and clean up work sites
- Load and unload construction materials, move materials to work areas
- Erect and dismantle concrete forms, scaffolding, ramps, catwalks, shoring and barricades required at construction sites
- Mix, pour and spread materials such as concrete and asphalt
- Level earth to fine grade specifications using rake and shovel
- Assist in demolishing buildings using prying bars and other tools and sort, clean and pile salvaged materials
- Remove rubble and other debris at construction sites using rakes, shovels, wheel barrows and other equipment
- Operate pneumatic hammers, vibrators and tampers as directed
- Tend or feed machines or equipment used in construction such as mixers, compressors and pumps
- May find apprenticeships in trades such as carpentry, bricklaying, cement finishing, roofing and glazing.

# **OTHER INFORMATION**

This program will not be offered in the 2020 / 2021 Academic Calendar Year. For more information contact Program Coordinator Barry Sparrow at 705.759.2554 ext 2585 or email barry.sparrow@saultcollege.ca.

# **PROGRAM OF STUDY**

# **SEMESTER 1**

CCT100-4 Construction Safety/Tools CCT101-4 Rigging, Hoisting and Material Equipment Handling CCT102-4 Carpentry I CCT103-4 Blueprints, Specifications & Layout CMM115-3 Communications I MTH106-3 Trades Mathematics

# **SEMESTER 2**

ARC101-5 Building and Construction Estimating CAD100-4 Introduction to Computers and AutoCAD CCT120-4 Concrete and Formwork I CCT122-4 Scaffolding, Earthwork Barriers and Controls GEN100-3 Global Citizenship

# **Course Descriptions**

# Semester 1

# Construction Safety/Tools (CCT100) (4 credits)

This course focuses on safety practices and procedures in the construction industry. Students will learn about occupational and health safety standards, work site hazards, personal protective equipment and

maintenance requirements, and work site communication skills.

Hands on applications focus on safe operation of hand tools, power tools, powder actuacted tools and cutting torch.

# Rigging, Hoisting and Material Equipment Handling (CCT101) (4 credits)

Students will learn about the methods and procedures used in rigging and hoisting operations. They will learn how to safely use rigging and hoisting equipment and applications, communicate with co-workers using radio international hand signals, hoisting, use jacks in blocking and how to use manual lifting devices.

Students will also learn about the methods and procedures used in the safe handling of stationary equipment including pumps, compressors, generators and lighting stations.

# Carpentry I (CCT102) (4 credits)

Students will gain knowledge of the types, use and the application of materials used in Residential and Commercial construction. They will develop knowledge of wood and lumber properties including the applicable wood joints and fasteners required. The skills will be developed using a variety of shop projects.

# Blueprints, Specifications & Layout (CCT103) (4 credits)

This course focuses on interpreting blueprints, drawings and layouts using architectural and measurement conventions to industry standards of practice. Students will learn to interpret sketches and drawings and learn to use scales, tapes and measurement conventions. They will also learn basic principles of construction layout. Throughout the course, the student will be familiarized with relevant provisions of the Ontario Building Code.

# Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

# Trades Mathematics (MTH106) (3 credits)

This course for construction techniques and home inspection technician programs begins with a review of fundamental concepts including arithmetic operations. Some theoretical concepts and topics in proportion and variation, measurement, geometry, and trigonometry will be covered. These concepts and topics will be reinforced by the use of practical problems to make the current topic relevant to the students needs. Aspects of business math pertaining to the construction field will be introduced.

# Semester 2

# Building and Construction Estimating (ARC101) (5 credits)

This course covers the theories and principles of estimating and quantity survey techniques applied to light construction projects. The subject includes mathematics of estimating, site work, concrete and form work, carpentry, masonry, and moisture protection and finishes. The student will develop unit construction costs to supply and install building elements.

# Introduction to Computers and AutoCAD (CAD100) (4 credits)

This course briefly introduces students to computer concepts and PC software applications. Practical skills in the use of Windows, file management and spreadsheets will be developed. With this basic foundation, the student will explore the fundamentals of computer assisted drafting using AutoCAD. Practical exercises will help the student develop a basic knowledge of AutoCAD. The student will understand the fundamental concepts of computer applications related to architectural and engineering drawing.

# Concrete and Formwork I (CCT120) (4 credits)

This course focuses on the methods and procedures used in the placement of concrete and form setting. Students will learn about equipment and tools used in concrete placement, and will learn to install concrete and grout material as well as reinforcement components. Students will also learn to interpret blueprints for form setting activities and the use of form setting tools.

# Scaffolding, Earthwork Barriers and Controls (CCT122) (4 credits)

In the first part of the course, the student will be able to describe the methods and procedures required for scaffold erection and dismantling according to industry standards and practices.

In the second part of the course, the student will be able to describe earthwork barriers and environmental control practices and procedures according to industry standards and practices.

# Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

# Mechanical Techniques - Industrial Maintenance (Millwright)

Section B.134 6/2/2020

**Ontario College Certificate (1 Year - 2 Semesters ) (5082)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

# **PROGRAM OVERVIEW**

The Mechanical Techniques - Industrial Maintenance (Millwright) program is designed for individuals interested in pursuing a career in mechanical trades. It provides you with a solid foundation in mechanical skills and the hands-on aspects of the trade, including such things as blueprint reading, operating hoisting and lifting devices, and installing and troubleshooting various systems. As a graduate of this program, you will also gain practical skills in the use of shop equipment and precision-measuring instruments to support the production and repair of components in a mechanical environment. Industrial mechanics (millwrights) are often sought-after to work in manufacturing plants, with utilities, and other industrial organizations maintaining, repairing, and installing equipment.

# **PROGRAM OUTCOMES**

# A graduate of the Mechanical Techniques Program at Sault College will reliably demonstrate the ability to:

- 1. complete all work in compliance with current legislation, standards, regulations and guidelines.
- 2. contribute to the application of quality control and quality assurance procedures to meet organizational standards and requirements.
- 3. comply with current health and safety legislation, as well as organizational practices and procedures.
- 4. support sustainability best practices in workplaces.
- 5. use current and emerging technologies to support the implementation of mechanical and manufacturing projects.
- 6. troubleshoot and solve standard mechanical problems by applying mathematics and fundamentals of mechanics.
- 7. contribute to the interpretation and preparation of mechanical drawings and other related technical documents.
- 8. perform routine technical measurements accurately using appropriate instruments and equipment.
- 9. assist in manufacturing, assembling, maintaining and repairing mechanical components according to required specifications.
- 10. select, use and maintain machinery, tools and equipment for the installation, manufacturing and repair of basic mechanical components.

# Reference

Ministry of Training, Colleges and Universities Mechanical Techniques Program Standards (MTCU 41007), September 2010.

# **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C, and Grade 12 Foundations for College Math (C) MAP4C, or equivalent, or mature student status.

# **CAREER PATHS**

As a graduate of this certificate program, you can work in entry-level positions in a broad range of employment settings in the manufacturing industry, in both large and small organizations. Industrial mechanics/millwrights work in manufacturing plants, utilities, and other industrial organizations maintaining, repairing and installing equipment.

You may also pursue further education or apprenticeship training. If you wish to pursue an apprenticeship, you should contact the local office of the Ministry of Colleges & Universities, Apprenticeship Branch at 705.945.6815.

Industrial Mechanic/Millwrights perform some or all of the following duties:

- Read blueprints, diagrams and schematic drawings.
- Install, align, dismantle and move stationary industrial machinery and mechanical equipment.
- Operate hoisting and lifting devices.
- Inspect and examine machinery and equipment to detect and investigate irregularities and malfunctions.
- Install, troubleshoot and maintain power transmission, vacuum, hydraulic and pneumatic systems.
- Adjust machinery and repair or replace defective parts.
- Operate machine tools such as lathes and milling machinesto fabricate parts required during overhaul, maintenance or set-up of machinery.
- Clean, lubricate and perform other routine maintenance work on machinery.
- Assemble machinery and equipment prior to installation using hand and power tools and welding equipment.

# **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

# **OTHER INFORMATION**

For more information contact Donovan Kennedy at 705.759.2554 ext. 2581 or email Donovan.Kennedy@saultcollege.ca.

# **SEMESTER 1**

CMM115-3 Communications I DRF105-3 Drafting and Blueprint Reading ENV102-3 Industrial Health and Safety MCH121-3 Machine Shop Theory and Measurement MCH134-2 Materials and Fasteners MCH144-4 Machine Shop Practical I MTH151-3 Mathematics WLD121-2 Welding

# **SEMESTER 2**

ELR111-1 Electric and Electronic Controls GEN100-3 Global Citizenship MCH141-3 Power Transmission Systems MCH142-3 Pumps, Valves, Piping and Compressors MCH145-4 Machine Shop Practical II MCH244-4 Manufacturing Process MCH253-2 Bearings, Seals and Lubrication RIG101-2 Rigging and Hoisting

# **Course Descriptions**

# Semester 1

# Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

# Drafting and Blueprint Reading (DRF105) (3 credits)

In a hands-on environment students will learn blueprint reading, geometric dimensioning and tolerancing (G.D. & T.) and be introduced to AutoCAD. The course will commence with skill development in blueprint reading. These skills shall be applied to the machinist's trade and related areas. New information has been added to explain computer-aided design, new dimensioning practices, and assembly drawing interpretation. Using common shop terminology, industrial prints will be interpreted. G.D. & T. includes reading dimensional drawings in fractions, decimals and in metric units. AutoCAD is taught so that upon completion students can create computerized, mechanical drawings.

# Industrial Health and Safety (ENV102) (3 credits)

This is an introductory course for all those interested in industrial practices from the standpoint of industrial hygiene and industrial health and safety. Students will become familiar with pertinent legislation, industry and workers rights and responsibilities, recognition, evaluation and control methods and safe working practices.

# Machine Shop Theory and Measurement (MCH121) (3 credits)

This course is designed to give the students an understanding of the theoretical aspects of machining and manufacturing including feeds, speeds, threading and gear cutting formulas. This course is also designed to strengthen the student's ability to measure and inspect to precise tolerances. Tools using micrometer and vernier scales for linear and angular measurement will be used. There will be a basic introduction to Statistical Process Control (SPC), including interpretation and recording of data.

## Materials and Fasteners (MCH134) (2 credits)

To provide students with a working knowledge of the theory behind the procedures that are used in the heat treating and machining of carbon steels, aluminum and its alloys. Practical lab/shop activities will be used to enhance and/or demonstrate theoretical concepts where possible.

## Machine Shop Practical I (MCH144) (4 credits)

A study of shop machines, safety, and tool care, measurements and layout, bench work and hard tools, material identification, heat treatment and testing, basic lathe, saws, drill presses, shapers, grinder, and milling machine, theory and practices, speeds, feeds, tapers, threads.

## Mathematics (MTH151) (3 credits)

In this course, emphasis will be placed on teaching mathematics at a level that will help the student in the Machining trade. Some theoretical concepts and topics in algebra, geometry and trigonometry will be covered. These concepts and topics will be reinforced by the use of practical problems to make the current topic relevant to the students' needs.

## Welding (WLD121) (2 credits)

A trades curriculum that has been designed to provide students with a combination of theoretical knowledge and hands-on skill in relation to the safe use and operation of both OFG/SMA welding, cutting and heating equipment.

## Semester 2

## Electric and Electronic Controls (ELR111) (1 credits)

This course will provide students with the basic knowledge of electric and electronic theory. Students will learn about the purpose, scope of electrical codes, purpose and function of electrical components, selection and safe use of electrical instruments and electric and electron principles. They will also understand and be able to apply OHM's law including units and relationships.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Power Transmission Systems (MCH141) (3 credits)

A trades course designed to provide students with knowledge of power transmission systems such as belt drives, chains, gears, shafts and couplings.

## Pumps, Valves, Piping and Compressors (MCH142) (3 credits)

In this course, the student will learn about the different applications, installation, maintenance and types of pumps, valves, piping, compressors and ancillary equipment.

## Machine Shop Practical II (MCH145) (4 credits)

This course will continue to build on the study of shop machines, safety, and tool care, measurements and layout, bench work and hard tools, material identification, heat treatment and testing, basic lathe, saws, drill presses, grinder, and milling machine, theory and practices, speeds, feeds, tapers, and threads.

## Manufacturing Process (MCH244) (4 credits)

A job planning course to cover shop organization costing, routing and scheduling, various processes as to viability and methods including foundry processes, hard mould casting, die casting, plastics and rubbers,

primary metal working, welding, forging and comparisons as to quality, economics and feasibility.

## Bearings, Seals and Lubrication (MCH253) (2 credits)

Students will learn about selecting, installing and maintaining friction/plain and rolling element bearings and static and dynamic seals. They will learn to interpret ISO charts and bearing catalogues. Students will also learn about bearing lubricants and their proper application.

#### **Rigging and Hoisting** (RIG101) (2 credits)

This course is designed to provide the student with the knowledge and understanding of correct lifting and hoisting procedures and the safe use of all equipment.

## Mechanical Techniques - Machine Shop

Section B.135 6/2/2020

Ontario College Certificate (1 Year - 2 Semesters ) (4040) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

The Mechanical Techniques - Machine Shop (Machinist) program is designed to provide you with a strong foundation in the use of shop equipment and precision measuring instruments. As a student of this program, you will gain knowledge and hands-on skills with a wide variety of equipment including lathes, milling machines, and grinders, as well as precision measuring instruments, to support the production and repair of components in a mechnical environment.

## **PROGRAM OUTCOMES**

## A graduate of the Mechanical Techniques Program at Sault College will reliably demonstrate the ability to:

- 1. complete all work in compliance with current legislation, standards, regulations and guidelines.
- 2. contribute to the application of quality control and quality assurance procedures to meet organizational standards and requirements.
- 3. comply with current health and safety legislation, as well as organizational practices and procedures.
- 4. support sustainability best practices in workplaces.
- 5. use current and emerging technologies to support the implementation of mechanical and manufacturing projects.
- 6. troubleshoot and solve standard mechanical problems by applying mathematics and fundamentals of mechanics.
- 7. contribute to the interpretation and preparation of mechanical drawings and other related technical documents.
- 8. perform routine technical measurements accurately using appropriate instruments and equipment.
- 9. assist in manufacturing, assembling, maintaining and repairing mechanical components according to required specifications.
- 10. select, use and maintain machinery, tools and equipment for the installation, manufacturing and repair of basic mechanical components.

## Reference

Ministry of Training, Colleges and Universities Mechanical Techniques Program Standards (MTCU 41007), September 2010.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma with Grade 12 English (C) ENG4C, and Grade 12 Foundations for College Math (C) MAP4C, or equivalent, or mature student status.

## **CAREER PATHS**

You can work in entry-level positions in a variety of sectors in the manufacturing industry, in both large and small organizations. Machinists work in manufacturing shops that produce or repair parts and maintain, repair or modify existing machinery. You may also pursue further education or apprenticeship training. If you wish to pursue an apprenticeship, you should contact the local office of the Ministry of Colleges & Universities, Apprenticeship Branch at 705.945.6815.

Machinists perform some or all of the following duties:

- Read and interpret engineering drawings, blueprints, charts and tables or study sample parts to determine machining operation to be performed, and plan best sequence of operations.
- Compute dimensions and tolerances and measure and lay out work pieces.
- Set-up, operate and maintain a variety of machine tools to perform precision, boring, planning, drilling, precision grinding and other operations.
- Fit and assemble machined parts and subassemblies using hand and power tools.
- Verify dimensions of products for accuracy and conformance to specifications using precision measuring instruments.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

For more information contact Donovan Kennedy at 705.759.2554 ext 2581 or email Donovan.Kennedy@saultcollege.ca.

## **PROGRAM OF STUDY**

#### SEMESTER 1

CMM115-3 Communications I DRF105-3 Drafting and Blueprint Reading ENV102-3 Industrial Health and Safety MCH121-3 Machine Shop Theory and Measurement MCH134-2 Materials and Fasteners MCH144-4 Machine Shop Practical I MTH151-3 Mathematics WLD121-2 Welding

## **SEMESTER 2**

ELR111-1 Electric and Electronic Controls GEN100-3 Global Citizenship MCH141-3 Power Transmission Systems MCH142-3 Pumps, Valves, Piping and Compressors MCH145-4 Machine Shop Practical II MCH244-4 Manufacturing Process MCH253-2 Bearings, Seals and Lubrication MET207-3 Metallurgy

## **Course Descriptions**

Semester 1

## Communications I (CMM115) (3 credits)

This course is designed to help students develop the skills necessary to communicate effectively in their programs and at the college level. Students will think critically to capture the meaning messages and respond appropriately; produce coherent, clear paragraphs; and purposively research and responsibly integrate credible sources into their own writing. Emphasis is placed on the writing process, from planning to revising, while providing opportunities to explore various modes of communication.

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## Machine Shop Practical I (MCH144) (4 credits)

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In this course, emphasis will be placed on teaching mathematics at a level that will help the student in the Machining trade. Some theoretical concepts and topics in algebra, geometry and trigonometry will be covered. These concepts and topics will be reinforced by the use of practical problems to make the current topic relevant to the students' needs.

## Welding (WLD121) (2 credits)

A trades curriculum that has been designed to provide students with a combination of theoretical knowledge and hands-on skill in relation to the safe use and operation of both OFG/SMA welding, cutting and heating equipment.

## Semester 2

## Electric and Electronic Controls (ELR111) (1 credits)

This course will provide students with the basic knowledge of electric and electronic theory. Students will learn about the purpose, scope of electrical codes, purpose and function of electrical components, selection and safe use of electrical instruments and electric and electron principles. They will also understand and be able to apply OHM's law including units and relationships.

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A trades course designed to provide students with knowledge of power transmission systems such as belt drives, chains, gears, shafts and couplings.

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This course will continue to build on the study of shop machines, safety, and tool care, measurements and layout, bench work and hard tools, material identification, heat treatment and testing, basic lathe, saws, drill presses, grinder, and milling machine, theory and practices, speeds, feeds, tapers, and threads.

## Manufacturing Process (MCH244) (4 credits)

A job planning course to cover shop organization costing, routing and scheduling, various processes as to viability and methods including foundry processes, hard mould casting, die casting, plastics and rubbers, primary metal working, welding, forging and comparisons as to quality, economics and feasibility.

## Bearings, Seals and Lubrication (MCH253) (2 credits)

Students will learn about selecting, installing and maintaining friction/plain and rolling element bearings and static and dynamic seals. They will learn to interpret ISO charts and bearing catalogues. Students will also learn about bearing lubricants and their proper application.

## Metallurgy (MET207) (3 credits)

A combination of lab and theory designed to provide Mechanical Drafting Technicians with the basics of metallurgy. More specifically, it deals with the production of iron and steel; heat treating methods and surface treatments; the shaping and forming of metal; as well as the properties of metals.

## Metal Fabrication Technician

Section B.136 6/2/2020

Ontario College Diploma (2 Years - 4 Semesters ) (4051) 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **PROGRAM OVERVIEW**

The Metal Fabrication Technician (welder-fitter) program at Sault College will provide you with the thorough knowledge and understanding needed in the fields of welding and fabricating. The first year of this two-year program concentrates on covering welding techniques, while the second year focuses on more in-depth knowledge related to how to build structures made of metal. During your education, you will be taught how to safely and effectively lay out and then build the parts needed for large projects like bridges, buildings, towers and platforms. You will also learn how to construct and repair steel stairs, boilers, tanks, chutes, hoppers, stacks, and other assemblies and steel structures. Skilled instructors will teach you how to successfully plan interesting projects, quote the costs of materials needed, and use state-of-the-art equipment to make parts for projects with varying degrees of difficulty and assemble them.

If you are a Canadian citizen or permanent resident and currently unemployed, you may qualify for <u>second</u> <u>career</u> funding for this program! To learn more about your options and how to get started, contact us at <u>studentrecruitment@saultcollege.ca</u>.

## **PROGRAM OUTCOMES**

## A graduate of the Metal Fabrication Technician Program at Sault College will reliably demonstrate the ability to:

- 1. Interpret blueprints and produce basic drawings and bills of materials.
- 2. Apply knowledge of various welding and metal cutting techniques and theories to produce components and sub-assemblies.
- 3. Prepare materials by utilizing fabrication machinery and equipment.
- 4. Create and use patterns and templates using common layout and measuring tools.
- 5. Understand and use a variety of destructive and non-destructive methods to test welds.
- 6. Develop project plans relating to component and sub-assembly production.
- 7. Complete all work in compliance with health and safety legislation and prescribed organizational practices and procedures to ensure safety of self and others.
- 8. Work responsibly and effectively in accordance with government safety regulations, manufacturers recommendations and approved industry standards.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma, or mature student status.

## **CAREER PATHS**

As a successful graduate of our Metal Fabrication program, you may find work in a wide range of exciting

places of employment across the globe or close-to-home.

Small and large construction and manufacturing industries continually seek out metal fabricators (welder-fitters) to join their teams.

After you have successfully learned with us, you will be able to:

- perform a large number of welding processes and metal-cutting techniques safely, including stick/shielded metal arc welding, mig/gas-metal arc welding, and tig/gas-tungsten arc welding, among others;
- interpret and develop drawings, field sketches, project plans, and bills of materials for welding projects following codes and specifications;
- understand and use a variety of methods to test welds;
- apply knowledge of various welding and metal cutting techniques and theories to produce components and sub-assemblies;
- create and use patterns and templates using layout and measuring tools and techniques; and
- prepare materials by using cutting-edge computer numerically-controlled (CNC) equipment.

Once you have successfully completed your studies, you may have the opportunity to test on-site with the Canadian Welding Bureau (CWB) for your welding performance qualifications/certified ticket at an additional cost to you.

## **MANDATORY FEES**

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **PROGRAM OF STUDY**

## **SEMESTER 1**

CMM149-3 Practical Communications I MTF101-3 Applied Blueprint Reading MTF102-3 Welding Theory 1 MTF105-2 GAS Shielded Semi-Automatic Welding 1 MTF107-4 Shield Metal Arc Welding I MTF108-2 Trade Practices MTF109-2 Oxy Fusion and Braze Welding

## **SEMESTER 2**

MTF131-3 Fabrication 1 MTF132-2 GAS Tungsten Arc Welding (GTAW) 1 MTF133-2 Machine Operations MTF137-3 Shielded Metal Arc (SMAW) Welding 2 MTF139-1 Thermal Cutting MTF140-3 Blueprint Reading - Advanced MTF141-3 Materials and Process Quality

#### MTF142-3 Semiautomatic Welding

## **SEMESTER 3**

MTF201-5 Fabrication 2 MTF207-2 Pattern and Template Development 1 MTF209-3 Project Planning and Installation MTF210-2 Shielded Metal Arc Welding - Advanced MTF211-5 Assembly and Fabrication of Detailed Components GEN100-3 Global Citizenship

## **SEMESTER 4**

MTF235-3 Pattern and Template Development 2 MTF236-8 Field Fitting and Layout MTF237-2 Automated Cutting MTF238-2 Blueprints and Patterns TNY130-3 Technology in Society

#### Select one of the following:

GEN110: Student Selected General Education

**Note:** \*This student-selected general education course code indicates a general-education course is taken in this semester. Students will choose from a selection of courses (<u>details</u>) prior to the semester in which the student-selected general education course is to be taken.

## **Course Descriptions**

#### Semester 1

#### Practical Communications I (CMM149) (3 credits)

This course helps students develop reading, writing, listening, and speaking skills required for various apprenticeship and certificate programs. Practical program-related assignments assist students to acquire the essential skills for their field. As well, students prepare current job-search documents. The principles of writing are taught through the writing process.

## Applied Blueprint Reading (MTF101) (3 credits)

Perform drawings, common views, and basic drafting and sketching operations as applied to the welder/fabricator programs.

## Welding Theory 1 (MTF102) (3 credits)

Describe the functions and controls of welding power sources in accordance with government safety regulations, manufacturer's recommendations and approved industry standards.

## GAS Shielded Semi-Automatic Welding 1 (MTF105) (2 credits)

Describe the fundamentals, construction features and consumables of the Gas Metal Arc Welding (GMAW) process in accordance with government safety regulations, manufacturer's recommendations and approved industry standards.

## Shield Metal Arc Welding I (MTF107) (4 credits)

In this course, students are taught the processes of shielded metal arc welding (SMAW), including how to safely set up, use and maintain equipment operated in this type of welding. It will also cover how to select filler metals/electrodes needed to suit base metal for welding. Proper techniques on how to weld in the flat and horizontal positions are also developed throughout the course.

Trade Practices (MTF108) (2 credits)

This course helps students develop trade math skills related to welding. It offers a review of basic operations with topics covered including whole numbers, fractions and decimals, and progresses through measurements, area and volume calculations, and angular development, to finish with a section on bends, stretch-outs, economical layout, and take-offs

## Oxy Fusion and Braze Welding (MTF109) (2 credits)

This course teaches students how to safely set up Oxyfuel equipment, how to safely use the equipment, torch cut various thickness of metal materials, fusion weld with or without filler metal, and braze. Techniques needed to weld and cut, will develop hand eye skills required to be a welder.

## Semester 2

## Fabrication 1 (MTF131) (3 credits)

Plan and perform practical fitting projects in accordance with government safety regulations, manufacturer's recommendations, and approved industry standards.

## GAS Tungsten Arc Welding (GTAW) 1 (MTF132) (2 credits)

Perform welding procedures using Gas Tungsten Arc Welding (GTAW) process in accordance with government safety regulations, manufacturer's recommendations, and approved industry standards.

## Machine Operations (MTF133) (2 credits)

Use fabrication equipment for forming plate and structural shapes in accordance with government safety regulations, manufacturer's recommendations, and approved industry standards.

## Shielded Metal Arc (SMAW) Welding 2 (MTF137) (3 credits)

Perform CWB T class 1G, 2G (Flat and horizontal open root) positions, in accordance with government safety regulations and approved industry standards with a focus of meeting or exceeding the CAS test requirements.

## Thermal Cutting (MTF139) (1 credits)

In this course, students will learn the equipment and skills behind a number of main thermal cutting processes, including Plasma Arc Cutting and Air Carbon Arc Cutting. A review and more detailed cuts using Oxyfuel cutting is also included in the course.

## Blueprint Reading - Advanced (MTF140) (3 credits)

This course builds upon the skills developed in the first level of blueprint reading. Students will learn more in-depth practices related to the reading of Isometric and orthographic blueprints and complex drawings of structures needing to be built, repaired or modified, that involve welding and fitting.

## Materials and Process Quality (MTF141) (3 credits)

This course deals mainly with how metals are affected by welding. To be a competent welder, a good understanding of the materials being welded is needed as well as the processes and procedures required to produce sound, reliable welds. A thorough study of the mechanical and physical properties of metals is then followed by presentations that explain how metals are affected by forming and the application of welding heat. Safety precautions will be discussed, along with welding codes and standards. Topics range from Welding Metallurgy and Weldability of Metals to Testing and Inspection of Welds and Welder Certification.

## Semiautomatic Welding (MTF142) (3 credits)

This course will cover the continuation of Gas Metal Arc Welding, equipment, set-up and a variation of

gases as well as completing the two remaining positions: vertical and overhead welding. It will also cover the skills involved with welding Metal Core and Flux Core Arc Welding.

## Semester 3

## Fabrication 2 (MTF201) (5 credits)

Prepare fabrication and detail materials by utilizing machinery and equipment in accordance with government regulations, manufacturer's recommendations and specifications, and approved industry standards.

## Pattern and Template Development 1 (MTF207) (2 credits)

This course takes students through a step-by-step process on accurately laying out a template to be used for accurately completing projects. Techniques for the coping, bending, and rolling of metals are all covered. Each template is created using drafting and blueprint-reading skills for appropriately-sized templates as they relate to specific material size.

## Project Planning and Installation (MTF209) (3 credits)

This course will teach students how to map out the requirements needed for the successful implementation of projects. A variety of jobs will be presented including both small and large or complex ones will be covered. Student will develop skills in material estimates required for projects, as well as timeline and labour resource estimates, including the number of hours required to complete jobs undertaken. Pre-job planning for installations in the field or on-site will also be covered.

## Shielded Metal Arc Welding - Advanced (MTF210) (2 credits)

This course revisits the skills presented in introductory-level courses involving shielded metal arc welding. It provides students with additional time in the shop to finish projects they may have started in the first two courses, with a focus on reinforcing the skills they have learned so that their applied skills are strengthened. Once students demonstrate mastery of these basic techniques, they will be introduced to t-class open route welding of plates as well as begin working on pipe welding.

## Assembly and Fabrication of Detailed Components (MTF211) (5 credits)

In this course, students will build small, intricate projects that use various methods of connections as well as detailed lay-out and fitting to better understand the complexity of structures. A variety of tacking techniques as well as methods of forming and bending various structural materials working off of complex blueprints is also covered.

## Global Citizenship (GEN100) (3 credits)

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship is an opportunity to `Be the Change`. This course meets the Civic Life and Social and Cultural Understanding General Education themes.

## Semester 4

## Pattern and Template Development 2 (MTF235) (3 credits)

In this course students will taught how to develop and layout templates and patterns, through the interpretation of drawings, using common layout and measuring tools, applying shop formulas and

performing calculations to ensure the accuracy and functionality to meet the tolerances specified in the blueprints and specifications of the manufactured item.

## Field Fitting and Layout (MTF236) (8 credits)

This course is designed to incorporate all skills that students have obtained in Fabrication 1 & 2 demonstrate the skills to assemble various structures using bending, forming, shaping, tacking and welding procedures. Students will also take the role of a business and will be required to receive a verbal order, provide cost of job, submit the required materials, build entire assembly and produce full blueprints for all parts required.

## Automated Cutting (MTF237) (2 credits)

Students will be learning top of the line CNC (Coordinate Numerical Controlled) equipment as well as coordinate drive track cutter. Each will be taught how to properly operate desk CNC software, complete start-up sequence, verify material and plasma components to produce quality parts.

## Blueprints and Patterns (MTF238) (2 credits)

Students are to use skills developed in applied blueprint reading and Advanced Blueprinting classes, to produce a complete drawing package. Drawings to include Assembly, Shop prints, detailed views of each component and field sketches overall material and cutting list. This complete set of drawings will correspond to the individual shop project students are to build in Field Fitting and Layout.

## Technology in Society (TNY130) (3 credits)

This course will introduce students to the impact that technological change has on society. Illustrations and examples will be drawn from the students discipline. Potential topics include the social and economic impact of new technology, responsibilities and ethics, privacy, liability and technology-based crime, and emerging trends.

It is designed to provide students from varied programs and backgrounds with a particularly relevant and timely appreciation of the impact technology and technological advances have made on every aspect of society. Technology and its implementation in society have strengths, weaknesses, opportunities and threats. This course investigates the social, legal, and ethical issues the use of technology raises.

## Student Selected General Education (GEN110) (3 credits)

For Transfer Credit Purposes only.

## Pre-Trades and Technology

**Ontario College Certificate (1 Year - 2 Semesters ) (4005)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

If you're interested in the trades but aren't sure which area you would like best, this introductory program in Pre-Trades and Technology will give you the chance to sample different skills and backgrounds while giving you a solid foundational year in trades and technology. You will develop knowledge in areas such as welding, electrical, automotive, construction, millwright, machine shop and plumbing. The program is also appealing to those who may not have the high school courses required for admission into a technician or technology diploma program, or who meet the admission requirements, but would like to upgrade or explore a variety of vocations before choosing a focused area of interest.

## **ADMISSIONS**

## MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma or mature student status.

## **CAREER PATHS**

The Ontario Chamber of Commerce predicts that Ontario will face a shortage of about 100,000 skilled trade workers, due to retirement. As a graduate of the Pre-Trades and Technology Certificate program, you may move on to college post-secondary technology programs, apprenticeships, and/or the workplace. If you wish to pursue an apprenticeship, you should contact the local office of the Ministry of Colleges & Universities, Apprentice Branch at 705.945.6815.

This certificate program may lead you to other college programs in the skilled trades such as:

- Aircraft Structural Repair
- Mechanical Engineering Technician
- Mechanical Techniques Millwright or Machine Shop
- Motive Power Technician Advanced Repair
- Motive Power Fundamentals Automotive Repair or Heavy Equipment & Truck Repair
- Metal Fabrication Technician or Welding Techniques
- Electrical Engineering Technician and/or Technology
- Construction Carpentry Techniques
- Civil Engineering Technician

## **MANDATORY FEES**

Domestic		International	
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## **OTHER INFORMATION**

For more information contact Peter Corbett at 705.759.2554 ext 2530 or email Peter.Corbett@saultcollege.ca.

## **PROGRAM OF STUDY**

## **SEMESTER 1**

CMM149-3 Practical Communications I DRF120-2 Drafting and Blueprint Reading Basics ELR130-3 Electrical Fundamentals ENV102-3 Industrial Health and Safety HDG122-3 Personal and Academic Success Strategies MOT100-3 Introduction to Motive Power MTH162-3 Pre-Trades/Technology Mathematics 1

## **SEMESTER 2**

CTT134-2 Introduction to Computers CTT140-3 Construction Basics MCH140-4 Machine Shop Fundamentals MTF105-2 GAS Shielded Semi-Automatic Welding 1 MTH163-3 Pre-Trades/Technology Mathematics 2 PHY117-3 Concepts of Technical Physics PLM100-3 Introduction to Plumbing

## **Course Descriptions**

## Semester 1

#### Practical Communications I (CMM149) (3 credits)

This course helps students develop reading, writing, listening, and speaking skills required for various apprenticeship and certificate programs. Practical program-related assignments assist students to acquire the essential skills for their field. As well, students prepare current job-search documents. The principles of writing are taught through the writing process.

## Drafting and Blueprint Reading Basics (DRF120) (2 credits)

The tradesperson is often required to receive and transfer technical information. Drawings, free hand sketches, schematics and flow diagrams are forms of this information transfer. This introductory course will expose the student to these methods of information transfer by drawing objects using standard drafting techniques, making complete neat free hand sketches and extracting information from various construction drawings.

## Electrical Fundamentals (ELR130) (3 credits)

This course introduces students to electrical fundamentals. Safety issues, provincial and national codes relating to electrical installations and characteristics or electric circuits will be introduced. Students will participate in hands-on practical activities.

## Industrial Health and Safety (ENV102) (3 credits)

This is an introductory course for all those interested in industrial practices from the standpoint of industrial hygiene and industrial health and safety. Students will become familiar with pertinent legislation, industry and workers rights and responsibilities, recognition, evaluation and control methods and safe working practices.

## Personal and Academic Success Strategies (HDG122) (3 credits)

This course will prepare you for the rigors of academic life and enable you to develop a personal profile for college and career success. The main focus of this course will include accepting personal responsibility, discovering self-motivation, mastering self-management, employing interdependence, gaining self-awareness, adopting lifelong learning, and developing emotional intelligence. In addition, you will develop and produce a `Personal Profile` that will identify your personal learning style, communication style, and personality style to enable you to achieve success in learning about, understanding, and choosing the courses and careers that will lead to personal and professional satisfaction.

## Introduction to Motive Power (MOT100) (3 credits)

Students will learn about Motive Power trades including Automotive, Heavy Equipment/ Truck Coach and Marine and Small Engines. The course will provide students with hands-on practical experience in these trades. They will cover basic fundamentals of these trades.

## Pre-Trades/Technology Mathematics 1 (MTH162) (3 credits)

This first level mathematics course for the pre-trades and technology programs will allow students to establish their math preparedness level. Students will use a variety of math study skills and problem-solving strategies to become ready for college-level trades or technology math courses. Topics of focus include: fundamental concepts including arithmetic operations and concepts in measurement, ratio, proportion, per cents and introductory algebra.

## Semester 2

## Introduction to Computers (CTT134) (2 credits)

This course introduces students to computer concepts and PC software applications. Practical skills in the use of Windows, e-mail, the Internet, word processors and spreadsheets will be developed.

## Construction Basics (CTT140) (3 credits)

This course will familiarize students with construction basics. Students will learn to use a variety of basic hand and power tools used in the construction industry. Students will participate in hands-on practical activities.

## Machine Shop Fundamentals (MCH140) (4 credits)

This course will allow the student to develop the skills required to operate the various machines and equipment necessary to work safely and productively in a machining, manufacturing and maintenance setting with a focus on building parts or making repairs in industry. Special attention will be placed on accurate measurement and inspection.

## GAS Shielded Semi-Automatic Welding 1 (MTF105) (2 credits)

Describe the fundamentals, construction features and consumables of the Gas Metal Arc Welding (GMAW) process in accordance with government safety regulations, manufacturer's recommendations and approved industry standards.

## Pre-Trades/Technology Mathematics 2 (MTH163) (3 credits)

This course is a continuation of MTH162-3 (from Semester One) for pre-trades and technology students. Students will expand on their use of math study skills and problem solving strategies. The focus will be on meeting the students individual needs based on his or her personal goals. Topics of study may include:

graphing linear relationships, quadratic, exponential and logarithmic equations, geometry, and trigonometry of right and oblique triangles with applications.

## **Concepts of Technical Physics** (PHY117) (3 credits)

This course introduces students to the concepts of physics related to trades and technology fields of study. Students will participate in lectures, class demonstrations and laboratory work. Lab exercises will develop and reinforce the concepts learned in the course. Students will also develop an appreciation for physics as a science and its broad impact on the world as we know it.

## Introduction to Plumbing (PLM100) (3 credits)

Students will gain basic knowledge about plumbing. They will have the opportunity to practice safe handling and proper use of hand and power tools. They will practice performing various basic plumbing skills.

## Welding Techniques

**Ontario College Certificate (1 Year - 2 Semesters ) (4053)** 705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada



## **PROGRAM OVERVIEW**

Used in almost all trades, Welding Techniques can be seen in just about every part of our everyday lives. From the bridges we travel across to the house we live in or the vehicles we drive, welding has been used to create most of the structures you see around you. In this dynamic program, you will learn everything from the practical, hands-on skills needed to weld various types of metals, combined with the knowledge and theory of how to best do this. You will also learn how to properly use a wide-range of top-of-the-line equipment found in most industry workplaces safely and effectively in our shops and labs under the direction of our highly-qualified and supportive instructors. In addition, you will be taught how to read, understand and develop the blueprints for different projects as you apply what you learn in this specialized field. All around us, things are welded together to build our world. Help build your future through learning welding skills with us.

#### **PROGRAM OUTCOMES**

#### A graduate of the Welding Techniques Program at Sault College will reliably demonstrate the ability to:

- 1. Perform work responsibly and in compliance with the Occupational Health and Safety Act.
- 2. Interpret engineering drawings and blueprints and produce basic graphics as required by industry.
- 3. Recognize and understand use of welding symbols.
- 4. Use layout and fabrication processes typical to the industry to determine correct form with accuracy.
- 5. Select appropriate tools and devices to perform mathematical calculations and technical measurements for successful completion of a project.
- 6. Perform weld applications utilizing Shielded Metal Arc (SMAW), Flux Core (FCAW) and Gas metal Arc (GMAW Mig Welding) welding equipment.
- 7. Use welding techniques according to industry standards.
- 8. Create high quality welds on various types of materials and create joints in the flat, horizontal, vertical and overhead positions.
- 9. Identify defect in welds, demonstrate how to prevent them and define procedures for correction of defective weld quality.

## **ADMISSIONS**

#### MINIMUM ACADEMIC REQUIREMENTS

Ontario Secondary School Diploma, or mature student status.

## **CAREER PATHS**

As a successful graduate of our Welding Techniques program, you may find work in a wide range of exciting places of employment across the globe or close-to-home.

Small and large construction and manufacturing industries continually seek out welders to join their teams.

After you have learned with us, you will be able to:

- perform a large number of welding processes and metal-cutting techniques safely, including stick/shielded metal arc welding, mig/gas-metal arc welding, and tig/gas-tungsten arc welding;
- prepare drawings, common views and basic drafting and sketching operations for welding projects; and
- understand and use a variety of methods to test welds.

Once you have successfully completed your studies, you may have the opportunity to test on-site with the Canadian Welding Bureau (CWB) for your welding performance qualifications/certified ticket at an additional cost to you.

If you successfully finish your year in the welding techniques program, you can apply what youve learned to smoothly transition into the second-year of the Colleges two-year metal fabrication program without any further courses needed.

## MANDATORY FEES

Domestic		International	
Tuition	Ancillary	Tuition	Ancillary
\$2,716.50	\$1,117.00	\$15,180.80	\$1,577.00

These fees are for the 2020-2021 academic year (year 1 of study) and are subject to change. Please visit your Student Portal to view your Schedule of Fees.

## **OTHER INFORMATION**

Work with your hands in this one year program. Welding is used in almost every trade.

For more information contact Program Coordinator Steve Witty at 705.759.2554 ext 2550 or email <u>steve.witty@saultcollege.ca</u>.

## **PROGRAM OF STUDY**

## **SEMESTER 1**

CMM149-3 Practical Communications I MTF101-3 Applied Blueprint Reading MTF102-3 Welding Theory 1 MTF105-2 GAS Shielded Semi-Automatic Welding 1 MTF107-4 Shield Metal Arc Welding I MTF108-2 Trade Practices MTF109-2 Oxy Fusion and Braze Welding

## **SEMESTER 2**

MTF131-3 Fabrication 1 MTF132-2 GAS Tungsten Arc Welding (GTAW) 1 MTF133-2 Machine Operations MTF137-3 Shielded Metal Arc (SMAW) Welding 2 MTF139-1 Thermal Cutting MTF140-3 Blueprint Reading - Advanced

## **Course Descriptions**

## Semester 1

## Practical Communications I (CMM149) (3 credits)

This course helps students develop reading, writing, listening, and speaking skills required for various apprenticeship and certificate programs. Practical program-related assignments assist students to acquire the essential skills for their field. As well, students prepare current job-search documents. The principles of writing are taught through the writing process.

## Applied Blueprint Reading (MTF101) (3 credits)

Perform drawings, common views, and basic drafting and sketching operations as applied to the welder/fabricator programs.

## Welding Theory 1 (MTF102) (3 credits)

Describe the functions and controls of welding power sources in accordance with government safety regulations, manufacturer's recommendations and approved industry standards.

## GAS Shielded Semi-Automatic Welding 1 (MTF105) (2 credits)

Describe the fundamentals, construction features and consumables of the Gas Metal Arc Welding (GMAW) process in accordance with government safety regulations, manufacturer's recommendations and approved industry standards.

## Shield Metal Arc Welding I (MTF107) (4 credits)

In this course, students are taught the processes of shielded metal arc welding (SMAW), including how to safely set up, use and maintain equipment operated in this type of welding. It will also cover how to select filler metals/electrodes needed to suit base metal for welding. Proper techniques on how to weld in the flat and horizontal positions are also developed throughout the course.

## Trade Practices (MTF108) (2 credits)

This course helps students develop trade math skills related to welding. It offers a review of basic operations with topics covered including whole numbers, fractions and decimals, and progresses through measurements, area and volume calculations, and angular development, to finish with a section on bends, stretch-outs, economical layout, and take-offs

## Oxy Fusion and Braze Welding (MTF109) (2 credits)

This course teaches students how to safely set up Oxyfuel equipment, how to safely use the equipment, torch cut various thickness of metal materials, fusion weld with or without filler metal, and braze. Techniques needed to weld and cut, will develop hand eye skills required to be a welder.

## Semester 2

## Fabrication 1 (MTF131) (3 credits)

Plan and perform practical fitting projects in accordance with government safety regulations, manufacturer's recommendations, and approved industry standards.

## GAS Tungsten Arc Welding (GTAW) 1 (MTF132) (2 credits)

Perform welding procedures using Gas Tungsten Arc Welding (GTAW) process in accordance with government safety regulations. manufacturer's recommendations. and approved industry standards.

#### Machine Operations (MTF133) (2 credits)

Use fabrication equipment for forming plate and structural shapes in accordance with government safety regulations, manufacturer's recommendations, and approved industry standards.

## Shielded Metal Arc (SMAW) Welding 2 (MTF137) (3 credits)

Perform CWB T class 1G, 2G (Flat and horizontal open root) positions, in accordance with government safety regulations and approved industry standards with a focus of meeting or exceeding the CAS test requirements.

## Thermal Cutting (MTF139) (1 credits)

In this course, students will learn the equipment and skills behind a number of main thermal cutting processes, including Plasma Arc Cutting and Air Carbon Arc Cutting. A review and more detailed cuts using Oxyfuel cutting is also included in the course.

## Blueprint Reading - Advanced (MTF140) (3 credits)

This course builds upon the skills developed in the first level of blueprint reading. Students will learn more in-depth practices related to the reading of Isometric and orthographic blueprints and complex drawings of structures needing to be built, repaired or modified, that involve welding and fitting.

## Materials and Process Quality (MTF141) (3 credits)

This course deals mainly with how metals are affected by welding. To be a competent welder, a good understanding of the materials being welded is needed as well as the processes and procedures required to produce sound, reliable welds. A thorough study of the mechanical and physical properties of metals is then followed by presentations that explain how metals are affected by forming and the application of welding heat. Safety precautions will be discussed, along with welding codes and standards. Topics range from Welding Metallurgy and Weldability of Metals to Testing and Inspection of Welds and Welder Certification.

## Semiautomatic Welding (MTF142) (3 credits)

This course will cover the continuation of Gas Metal Arc Welding, equipment, set-up and a variation of gases as well as completing the two remaining positions: vertical and overhead welding. It will also cover the skills involved with welding Metal Core and Flux Core Arc Welding.

# **Academic Departments**

Section C.1 2017-08-29

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When you study at Sault College, you will also be taking courses from several academic departments to broaden your learning and complement the courses offered in your program:

- Language and Communication
- Mathematics
- Social Sciences

#### LANGUAGE AND COMMUNICATION DEPARTMENT

Language and communication is becoming increasingly important in today's workplace. With tools such as email, Twitter, and Facebook being used professionally more and more, along with memos, letters, and reports, it has been estimated that the average worker will spend roughly 12 ½ hours out of every 40-hour week writing (Gerson & Gerson, 2010). It is no wonder, then, that professional writing is a key component of the college curricula. Students in all programs of study take at least one communication course at Sault College. Forms of writing, use of research and documentation, and effective workplace communication are the topics studied. Students will learn the APA formatting system and the importance of documenting all sources in their academic papers. As well, through communications courses, students will prepare for job interviews and employment readiness.

#### **ACADEMIC HONESTY**

All submissions must be the student's individual work. Students should refer to the definition of "Academic Dishonesty" in Student Code of Conduct. Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

#### THE WRITE PLACE

The Write Place is a faculty-led, drop-in tutorial available to all students. Any student who has questions or concerns about assignments, essays, reports, and APA requirements, may bring them to college Language and Communication professors for assistance. The Write Place operates 11:30-1:30 Tuesdays and Thursdays in Room M2180, and Wednesdays in Rooms M1245 and G1090 ("Little Enji," to coincide with Indigenous Studies' "Soup Wednesdays"). For times when students are unable to access the tutoring hours, they may submit questions via email at thewriteplace@saultcollege.ca.

For more information regarding Language and Communication courses, APA research and documentation, or The Write Place, contact:

Rhett Andrew, Language and Communication Department Co-ordinator, 705-759-2554, ext. 2551, or rhett.andrew@saultcollege.ca.

## MATHEMATICS DEPARTMENT

The department of Mathematics offers a variety of courses required for program completion.

By learning how to apply mathematics in their daily lives, students will learn how to develop skills in problem solving and analysis, which can be applied to personal decision making and to the evaluation of concerns in society. Engineering students and Health programs require more technical and applied math options. Be sure to check program entry requirements to determine math requirements and recommendations for entry.

Courses may include Algebra, Business Mathematics, Calculus, Every Day Math, Pre-Health Math and Technical Math.

## SOCIAL SCIENCES DEPARTMENT

The department of Social Sciences offers a variety of courses to help students explore their world. Content covers understanding people, groups, societies and relationships. This understanding helps students realize how we are all interconnected while also recognizing individual differences.

New electives have been developed as general education courses for all students.

Introduction to Canadian Aboriginal Peoples examines how history informs the evolution of Native people in a safe learning environment. It raises the profile of Native issues and embraces a world view from a Native perspective to allow for informed relationships between Native and Non-Native people creating a more respectful Canadian experience for everyone.

## **GLOBAL CITIZENSHIP**

Sault College wants students to become aware of a wider world by understanding the role of each student as an individual. By thinking globally and acting locally through community outreach activities, all students can take action to make the world a more equitable and sustainable place. The Global Citizenship course will discuss social justice and equity to diversity and interdependence. With a look at sustainable development, there is a concern for the environment and a belief that people can make a difference.

## EDUCATION, COMMUNICATION, PARTICIPATION

Understanding who you are and what your footprint will be is shaped by a thorough understanding of real world events. Our faculty, with their informed perspective, provide students with the content and opportunity to explore their worlds. Foundation courses in psychology, sociology, political science, native studies and global studies have been woven into the core curriculum of many of our academic programs. Understanding this material will help our students become more informed citizens and workers.

For more information, contact Marcia Jones, Social Science Co-ordinator at 705 759-2554, ext. 2653 or email <u>marcia.jones@saultcollege.ca</u>.

## **Student Selected General Education**

Section C.2 2020-05-13

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

## **GENERAL EDUCATION COURSES**

Students enrolled in 2- and 3- year programs must successfully complete three General Education courses as part of their program of study. One General Education course is student-selected, one is program-selected, and one is cross-College.

## STUDENT-SELECTED GENERAL EDUCATION COURSE OPTIONS

Students will choose one of the following General Education courses: (Note: course availability varies each semester; not all courses are available to all programs)

## 1. GAS109 - Music and Pop Culture

This course will give students the opportunity to think creatively and critically about the influence of popular music on culture. Students will explore different music genres (rock, metal, hip hop and rap), their development and social significance. Students may explore music in film, commercials, war and protest, social and civil rights movements, and the contributions of specific artists to contemporary culture. The ways in which popular music has contributed to the current culture and, in turn, how culture has shaped popular music will be examined.

## 2. GAS120 - Canada, Eh!

What does it mean to be Canadian? This course will examine the people of Canada and aspects of life, such as food, music, television, art, language, traditions, etc. By examining our diversity, we will come to understand that there is more than one Canadian identity.

## 3. GAS125 – Food and Wine Pairings

Become a wine enthusiast and decipher the many complexities revealed in wine by developing the ability to pair food and wine in today's culinary world. Whether planning to entertain in the comfort of your own home, preparing for a business dinner meeting or developing food and wine menus for restaurants or special events, understanding how to pair food and wine is invaluable and a life skill. This course will explore the significance of food and drink by examining fundamental concepts of wine history, tradition and culture. Students will learn about terroir, wine terminology, production, storage, and selection and how wine is properly served.

## 4. HDG122 - Personal and Academic Success Strategies

Substitutes: HDG111

This course will provide you with the opportunity to explore where you were then, where you are now, and where you will go in the future. You will investigate external and internal aspects that influence your character both personally and academically; develop awareness of college, community, family, and relationships; explore learning and communication styles, attitudes, and life-long learning applications to future career and life.

You will discover, through developing a personal portfolio, specific abilities and characteristics that will provide you the opportunity for personal growth and increased well-being to function at a higher level of human understanding. These skills will be developed through classroom discussion, personal surveys, journal entries, presentation reviews, analysis of case studies, reading comprehension activities, instructional games/exercises, and problem-solving challenges, etc.

## **CROSS COLLEGE GENERAL EDUCATION COURSE**

## **GEN100-3 Global Citizenship**

The world we are living in is one in which local, national and international issues are interwoven, and the need for us to understand the impact these issues can have on our lives has never been greater! Using a socio-cultural, political and environmental lens, students will view how the world is changing and how to become active agents of change – from the local to international level. Important issues such as social injustice, poverty, environmental protection, resource scarcity, sustainability, and health will be addressed. Global citizenship . . . an opportunity to 'Be the Change'.

## ADVANCE CREDIT TRANSFER:

Students who have received academic credits from other post-secondary programs or institutions may be eligible for a transfer of credit and so be exempted from their Student-selected and/or Cross-College General Education Course.

Please see the Academic Assistant for the School of Community Services & Interdisciplinary Studies, in room E3215, or call extension 2669, to inquire further.

Note: While it is recommended that students apply early in their program, there are no deadlines for a General Education Advance Credit Transfer.

## **Booklists and Timetables**

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

You can see your booklists and timetable, and print them off, by logging onto your student portal at <a href="https://my.saultcollege.ca/">https://my.saultcollege.ca/</a>. Your student portal access information is sent along with your application acknowledgement email. There are many important announcements and relevant details shared with students over the portal, so be sure to begin using it as soon as possible.

Section C.3 2017-06-26

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If you're not sure how to access the portal please contact the Help Desk at 705-759-2554 Ext: 2504.

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The Campus One Card is your student photo identification card. It's an important piece of ID that you'll want to get as soon as possible. You will need to bring a piece of photo ID with you and be fully registered to receive your Campus One card.

Photos for the card are taken at either the library or the Health and Wellness Centre gym during regular hours. You will get your card right after your picture is taken.

## Your Campus One card can be used for things like:

- Access to the following classrooms/labs:
  - Aviation Simulator Labs
  - Graphic Design Labs
- Borrowing library materials, course reserves, or equipment
- Using your meal plan
- Getting into the gym to work out or use sports equipment
- Applying for Financial Assistance (including picking up OSAP)
- Getting help at the Registrar's Office
- Receiving student discounts from local businesses.





## **Computer Access**

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As a registered student of our College, you will be able to use the convenient computer labs on campus free-of-charge and also have a computer account set up in your name. Your account will have 5 GB of storage space on the network for you to save your assignments and projects. You'll also be given a professional e-mail account which you should check regularly, as this is our main mode of communication with you.

Your username is: Your student number

Your password is: New students = welcome + postal code (lowercase, i.e., welcomep6a5m5)

Returning students = last password used

You'll also want to use the electronic LMS (learning management system) as you learn. Your professor will tell you more about it once you start classes.

Information on computer usage, including login, can be found at <u>itservicedesk@saultcollege.ca</u>. Information Technology Services (ITS), IT Service Desk is located in room B1035 and is available from 0800 – 2000 hours Monday to Friday and can be reached via phone at 705-759-2554 ext. 2504.

Other appointments can be made as required by contacting the IT Service Desk directly.



# Counselling / Accessibility Services

Section C.6 2016-06-16

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

Students are encouraged to drop into the counseling department to set up an appointment to get academic advice or to work through something that's been on your mind. If you want to improve your study skills, note-taking, test-taking, organizational skills or time management, we can help put you on the right track by providing support and information on all of these things free-of-charge. Visits are friendly, confidential, and can help change your life for the better.

Counsellors are located in A0174 and G1102. To book an appointment with a counsellor, drop in to the Counselling, Accessibility and Health Office in A0174 or call (705) 759-2554, extension 2703.

The mental health hub was developed as a model for Northern Colleges to ensure their students have access to mental health services that address prevention, diagnosis, treatment, and crisis service needs.

Our counsellors are also trained to assist students with disabilities. We can provide accommodations for you if you have physical, learning, medical or mental health disabilities. Accommodations are individualized, mitigate the impact of the disability and respect the student's dignity. Accommodations may include, but are not limited to: tutoring, note-taking, counselling, alternative test-writing arrangements, adaptive equipment and specialized technology, learning strategy training, assessments and sign language interpreting.

Students with disabilities who qualify for OSAP may also qualify for a bursary. The student, the counsellor, and the Financial Aid Administrator jointly process the bursary application. Students may use the bursary to support their disability-related educational expenses without incurring additional debt.

Students are encouraged to self-identify to Accessibility Services as early in the admission process as possible, in order to plan accommodations that will equalize opportunities to participate in all learning and evaluation activities within Sault College.

Once self-identification occurs for students without documentation available, the Counsellor and student will develop an interim accommodation plan and determine whether additional documentation of the disability can be secured by the student from a registered health practitioner. If the student has documentation of a permanent disability and chooses to provide the Counsellor a copy, the accommodation plan will be developed based on the functional restrictions and limitations as a result of the disability. Confidentiality is maintained within the parameters of the Freedom of Information and Protection of Privacy Legislation.

To make an appointment, drop by the Counselling, Accessibility and Health Office, A0174 or call (705) 759-2554, extension 2703. Our TDD number is (705) 946-8619. Additional detail is available on our web site at <a href="http://www.saultcollege.ca">www.saultcollege.ca</a>.

We also offer a Transition to College workshop for students with learning and mental health disabilities the last week of August.



The Sault College Library offers inviting spaces for group work or individual study, computers and audio-visual equipment, and a comfy lounge area to hang out with friends. Friendly, knowledgeable staff are available to help you find the information you need for your classes or personal life, just ask for help! For any questions contact us at (705) 759-2554 Ext: 2711.

#### Library Resources and Services

- One-on-one research assistance
- Through "EDS One Search" our integrated library system you can access thousands of books, online journal articles, ebooks and e-videos all at once at <u>www.saultcollegelibrary.ca</u>
- Get your Campus One Card at the Library
- Free Wifi
- Peer Tutoring:
  - If you need some assistance with a course, contact the Library for the Peer Tutoring group, drop-in session schedule
  - $\circ$  ~ If you would like to be a peer tutor please inquire for an application form
- Short-term loans of equipment:
  - Laptops, video cameras, digital cameras, digital audio recorders, etc)
  - Bookable study rooms for individuals and groups:
    - o Reserve a time online from our website at <u>http://www.saultcollegelibrary.ca/home/studyrooms</u>
    - Our Prayer room is located beside study room #7
- Over 50 computer workstations
- Course Reserves
- Program-based resource guides
- Popular magazines, graphic novels, and novels in the Reading Lounge
- A photocopier with free scan-to-email functionality
- Basic supplies stapler, 3-hole punch, scissors, tape, paperclips

## Library Hours during the Academic Year

- September to May
  - Monday Thursday 8:00 am to 8:00 pm
  - $\circ$   $\;$  Fridays 8:00 am to 4:30 pm
  - Sundays 12:00 am to 8:00 pm
- Extended hours during final exams
- You can reach the Library by calling: 705-759-2554 Ext:2711
- Text: 705-998-5954, chat with Library staff or email: library@saultcollege.ca
- Follow Sault College Library on Facebook, Twitter (@rondoylelibrary), or Pinterest

## Bookstore

Section C.8 2017-06-28

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

Visit the Bookstore in the E-wing for a great selection of books, supplies, gift ideas, clothing, and more. Open daily Monday to Friday from 8:30 a.m. to 4:30 p.m. We extend our hours both in September and January for your shopping convenience. We will price match to Amazon.ca! See store for details.

Rent your textbooks and save up to 80% off the new retail price!

Want to shop virtually? You can buy your books online at <u>www.saultshop.ca</u>, choose in store pick-up, or ship for \$7.50 flat rate.

To view your personalized booklists, please log onto your student portal.

We will buy back your textbooks for up to half the purchase price! See store for details.

Return purchases are accepted one week after class start date in the beginning of the Fall and Winter semesters. Following this, students have two days to return textbooks. (Original receipt required for returns).

During exam periods, there are no returns on textbooks. Course packs are not returnable.

Contact the Bookstore at 705-759-2554 ext. 2595.

# Locker / Storage

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

Lockers are available for student use if you wish to choose one. A registration card must be filled out and brought to the Parking & Locker Department located in the Physical Resources office, room B1140.

If you are unsure of which area of the College would be best to have a locker for your program of study, you may call Dana at 705-759-2554, ext: 2500, and she will be happy to help you in making a choice. If you require a locker for accessibility needs, we may also be able to accommodate this request.

Before sending in a registration card, a lock must be put on the locker first. You are responsible for providing your own lock. All locker changes must be sent to the locker program. It's very important to register your locker as soon as you choose one to prevent your lock from being cut and its' contents removed.

Summer clean out occurs after May 1st of each year, and you will need to empty your locker and remove your lock at that time. Each summer, lockers are cleaned and repairs are made to prepare for the upcoming academic year.

If you are starting College in the fall, please wait until after August 20 to choose your locker when the summer semester is over so that your lock doesn't get cut.





## Peer Tutoring

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

College courses move quickly and require students to take responsibility for large quantities of information in a short period of time and there may be times when you require additional support. The Peer Tutoring Program allows students who are excelling academically to help other students by leading weekly, drop-in tutorial sessions for a variety of subject areas and programs as well as core subjects such as English, math and physics. Tutors work with tutees to review course material and work through questions together. Students can attend for the whole two hours weekly or drop-in as needed with questions. Schedules are available in print in the Library or online at www.saultcollegelibrary.ca under the Peer Tutoring Tab.

One-on-One/Small Group tutoring is available for students with disabilities or a demonstrated need via a referral from an Academic Counsellor in Student Services.

Students interested in being hired as a Peer Tutor must have at least a B Average in the subject area they wish to tutor and must complete an application form that includes professor recommendations. International students are welcome to apply.

For more information on either obtaining a peer tutor or becoming a paid peer tutor, drop by the Library, email peer.tutoring@saultcollege.ca\_ or call 705-759-2554 ext. 2711.

Peer tutoring contact information:

Peer Tutoring Email:	peer.tutoring@saultcollege.ca
Library Technician/Peer Tutoring Coordinator:	Laura McKnight: laura.mcknight@saultcollege.ca
	705-759-2554 Ext: 2544
Library Technician/Peer Tutoring Assistant:	Jasmine Blatter: jasmine.blatter@saultcollege.ca
	705-759-2554 Ext: 2827

Section C.10

2017-06-28



## Student Code of Conduct

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

Sault College's Student Code of Conduct informs you of your rights and responsibilities and the College's expectations for your behavior while attending or residing at Sault College. The Code of Conduct is available in electronic format on the Student portal (<u>my.saultcollege.ca</u>) and printed copies of it are available in the Student Success Office, (A1280).



Section C.11

COLLEGE

## **Employment Services**

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

The Student Job Centre is located in A1283 and we are the hub for student employment. As part of the Student Services department, we offer a one-stop-shop where students and alumni can conveniently access computers, resume printing services, interview rooms and many other employment resources. A Student Employment Officer is there to assist with resumes, cover letters, interview prep, job search skills, networking, and building your online personal brand using LinkedIn. One-on-one appointments are available by contacting our office.

The Student Job Centre is responsible for posting employment opportunities year round, and providing access to employers through on-campus visits and career fairs throughout the school year. Job Postings can be found on our Job Boards outside A0150 (beside the Health Clinic), on your student portal at <a href="https://my.saultcollege.ca/">https://my.saultcollege.ca/</a> and the Sault College website <a href="http://www.saultcollege.ca/services/StudentJobsCentre/JobPostings.asp">http://www.saultcollege.ca/</a> and the Sault College website <a href="http://www.saultcollege.ca/services/StudentJobsCentre/JobPostings.asp">http://www.saultcollege.ca/</a> and the Sault College website <a href="http://www.saultcollege.ca/services/StudentJobsCentre/JobPostings.asp">http://www.saultcollege.ca/</a> So whether you're looking for an on-campus job during the school year, a part-time, co-op, summer or a graduate position, make sure you stop in, we would love to assist you with your career goals!

## **Contact Information:**

Student Job Centre (A1283) Sault College of Applied Arts and Technology 443 Northern Avenue East Sault Ste. Marie, Ontario P6B 4J3 Phone: 705-759-2554 ext 2480 Email: studentjobcentre@saultcollege.ca





Section C.13 2017-06-12

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

As a student in a Co-op program, you will usually take a Co-op work term during the summer semester (from May to September) after the first year. In order to register for this work term, a student must:

- 1. Have a cumulative Grade Point Average (GPA) of 2.0 or greater after minimum of two semesters
- 2. Not be missing 3 or more courses required for a diploma.\*

\* Students who have cleared "W, U and F" grades with a cumulative GPA of 2.0 or greater, may register for the Co-op work term in a subsequent semester.

Further criteria may be imposed, as approved by the Chair/Dean of a program.

## **CO-OPERATIVE EDUCATION SERVICES**

Employment services are provided to business, government, and industry. Students, alumni and graduates of Co-op programs are assisted in their search for Co-op summer, seasonal, permanent, part-time or contractual employment. For further information, please contact the Co-op office at 705.759.2554, ext. 2466 or online at <a href="https://www.saultcollege.ca/services/studentjobcentre/coop.asp">www.saultcollege.ca/services/studentjobcentre/coop.asp</a>

Co-operative Education programs are offered by Sault College following Education at Work (EWO) guidelines. For more information about these guidelines, go to <u>www.ewo.ca</u>.

Four-month or more, paid work terms are included as an integral part of the academic programs. The Co-operative Education schedules vary according to individual program and employer requirements.

## **Athletics & Fitness**

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

We have something for everyone! Campus recreation and special event activities offered throughout the year provide a fun and social atmosphere. Students looking for a more competitive stream have the opportunity to compete provincially and nationally for our Sault College Cougars in Basketball, Cross Country, Curling, Golf, Hockey and Indoor Soccer. The Sault College hockey program will make their debut in the American Collegiate hockey league's Division 3 program for the 2017-2018 season, making history as the first Canadian college to enter this elite level of competition.

If sports aren't your idea of fun, we have you covered with our fully functional fitness space featuring state of the art equipment and an indoor track that will meet the needs of all exercisers. Come and check out why we're #1 in Ontario for overall quality of facilities.

Contact #: 705-759-2554 Ext. 2709 Contact Email: <u>athletics@saultcollege.ca</u> Location: F2100



Section C.14 2017-06-12

Health & Dental coverage is provided to you through the Sault College Students' Union (SCSU). All full-time fee-paying students are automatically covered by the SCSU Health & Dental Plan. The Plan fee for coverage from September 1 to August 31 will be automatically included in your tuition and other fees. New full-time students in the Winter and Summer semesters pay a pro-rated fee for coverage until August 31. For more details on your Health & Dental coverage and for opting out information, visit <u>www.studentcare.ca</u> or stop by F1200 to speak to a staff member at SCSU who will be happy to assist you.

Both the Health Centre and First Aid Services are located in Room A0174. The Health Centre can be reached at 705-759-2554 ext. 2720. The Health Centre offers First Aid/CPR and treatment for minor illness, injuries, emergencies, assessment of illness or injury, with referral to appropriate care and emergency transportation to health facilities (such as the hospital emergency department). Weekly doctor clinics and aviation medicals can be scheduled. Monitoring chronic medical conditions, blood pressure, prescription renewal are also available in addition to health and personal counselling and referrals if necessary. Student insurance claim forms are available in the Health Centre. In addition, health immunization forms are reviewed for student placement. Some immunizations are completed at the beginning of each semester in conjunction with the Nurse Practioner Clinic which is also adjacent to campus however students are encouraged to get their immunizations completed before starting college. The Algoma Public Health Unit is also adjacent to the campus, where students can get other immunizations and additional public health testing as needed.

International Students are covered by a Health Insurance plan provided by Guard.me, coverage begins based on your start date of your program and runs until you graduate. Some of the many benefits of this plan are: up to 100% eligible coverage for Emergency Hospital Visit, X-Rays, some Lab Testing, Eye Exams, Ambulance, Prescription Drugs, Dental – Accidental Injury and Dental – Emergency to list a few. The student is covered worldwide, except in their home country. For more information about this great coverage, visit <u>www.guard.me</u>



Section C.16 2017-06-29

## **Applied Research Centre (ARC)**

Section C.17 2017-06-26

SAULT

COLLEGE

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

As a member of the, province-wide network for applied research, Sault College has opened the Applied Research Centre (ARC). The ARC provides students with a direct link to local and regional enterprises that are developing and improving products and services for the global marketplace. Students who participate in industry-sponsored, applied research projects will have the opportunity to develop hands-on skills by working closely with industry professionals and faculty members as they help to solve real life problems. At the same time, students could develop valuable industry contacts that may lead to future employment opportunities.

What types of projects could I work on?

As a student researcher, you could be involved in exciting and rewarding projects that help industry partners to solve technical problems, adapt new technologies for the marketplace, develop prototypes and new or improved products, processes or services, and test/evaluate and perform proof of concept studies.

For more information, please speak to a faculty member or call John Coccimiglio, Applied Research Centre Manager at 705.759.2554 ext. 2498 or email john.coccimiglio@saultcollege.ca.



At Sault College, we will make our society a better place by providing a transformative life experience through empowering those who study with us to think and learn in progressive, innovative ways, including those we have not yet imagined.

- Sault College vision

## Studying at Lake Superior State University

Section C.18 2017-07-19

SAULT

COLLEGE

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

Combining a college and university education gives you an opportunity to experience the educational benefits of attending two great institutions in two countries located only 20-minutes apart, with Sault College in Sault Ste. Marie, Ontario and Lake Superior State University (LSSU) in Sault Ste. Marie, Michigan.

## HOW DOES IT WORK?

Once enrolled at Sault College or Lake Superior State University, you'll need to let the Registrar's Office know of your intention to continue on in your studies for a degree or diploma. You can let us know when you first apply or, as soon as you make the decision to do so. Letting us know as soon as possible lets us help you with course selection and transfer requirements.

## BENEFITS

There are many benefits to studying at both Sault College and LSSU. A few of these include:

- Guaranteed entrance to the upper-level classes in LSSU's Bachelor of Arts or Bachelor of Science degree programs when you complete your diploma at Sault College, as long as you meet the academic standards/criteria.
- Extra planning assistance from both Sault College's and LSSU's academic departments, to help make sure your course schedule meets your objectives in the most efficient time frame.
- Financial savings by combining two years of a college education with only one-and-a-half to three years at university. The savings amount depends upon which degree you take, but in all situations, you will save thousands of dollars.
- Help from both institutions' Student Financial Assistance Offices to make the most of your money, including budgeting training and tracking, OSAP funding, special bursaries and scholarships, plus paid work placement opportunities.
- Efficient transfer of your academic information from one institution to the other.
- Access to many of the student services and academic resources available at both schools.
- Assistance in acquiring student visas (both part-time and full-time).
- An education that reflects both the practical, hands-on opportunities and theory provided at college and the largely theoretical approaches followed at universities.
- The chance to experience beautiful Northern Ontario and Northern Michigan. This is Lake Superior country great outdoor activities are just minutes away from both campuses hiking, skiing, snowmobiling, fishing (on ice, too!) and more.

- An international educational experience.
- As an Ontario student, you pay the same, in-state tuition at LSSU as do Michigan residents.
- As the exchange rate for the Canadian dollar in comparison to the American one improves, the savings increase.

To learn more about how to transfer to LSSU, please contact the Registrar's Office or email <u>registrar@saultcollege.ca</u>.

Details on all transfer options are available online at:

http://www.saultcollege.ca/services/Registrar/UniversityPathways.asp

## Alumni

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

Our graduates are well-respected globally and continue to make a difference no matter where they are or what they may be doing.

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SAULT

COLLEGE

Upon receipt of your certificate, diploma, or degree from our College, you will join a growing community of over 30,000 proud and successful Sault College graduates across Canada and around the world. We encourage you to keep in touch with us. If you are interested in speaking to current students, participating in Alumni events, volunteering within the Alumni Relations Department, or helping to promote Sault College, please contact the Alumni Relations Office at <u>alumni@saultcollege.ca</u> or by calling 705.759.2554, ext. 2491 at Sault College. We look forward to hearing from you!

"I chose to study at Sault College because I'm from the local area and realized that I could get the best education here. I looked at other courses around the province and liked what Sault College offered best. Plus, they rank at the top of the province in important ratings, like grad satisfaction. Now that I'm a grad, I see why! I'm coming back for another one-year program even though I've already graduated. Like more than a third of Sault College students, I love learning here so much I've decided to carry on with my post-secondary education."

- Justine Chalykoff, Sault College 2011 graduate

### INDIGENOUS STUDENT SERVICES

We want you to succeed. Our team is dedicated to providing support from the time you consider applying for college until the time you graduate ... and beyond.

## OUR CENTRE Enji Maawnjiding "Where We Gather"

# Indigenous Education offers an inviting multi-use gathering place for the campus community. It is equipped with media equipment, including a large screen for presentations or movie watching. Study-time or downtime, Enji Maawnjiding is a home away from home. Located just outside the Centre is our Sacred Fire Arbour and Sweatlodge.

## STUDY HALL Enjiins "Little Enji"

Little Enji is a quiet space located in G1090 that is equipped with 8 computer stations and tables for students to study and complete assignments.

### INDIGENOUS STUDENT EVENTS

Throughout the year, Indigenous Education hosts a number of free events, such as movie nights, soup days, feasts, and workshops.

### ELDERS-IN-RESIDENCE

Our College Elders are located in G1100 and are always available for consultation. They are host to a variety of cultural activities during the school year.

#### COUNSELLING

Indigenous Education has two Counsellors available to assist students. Stop by G1102 or contact Kris at 705-759-2554 ext. 2452 to make an appointment.

#### INDIGENOUS STUDENT COUNCIL

Indigenous Student Council promotes strong student leadership and promotes a sense of community away from home. Student government is a great way to become more actively involved in student life on campus.

For more information, check us out at: <u>www.nativeeducation.ca</u>.



Section C.20 2017-08-29



## **Food Services**

Section C.21 2017-06-26





Chartwells provides all members of the College Community with quality food served in a warm, friendly atmosphere. There are three main facilities to serve you: The Marketplace Cafeteria, Tim Hortons Coffee Shop and Subway.

Your meal plan can be used at all three foods service locations. We provide two meal plan options - one specifically for residence students which is tax free and a super savings card for those living off campus as well as for faculty and staff which offers a 5% discount. The meal plan uses a declining balance card system and offers many advantages. No need to carry cash, just use your student card. No debit fees and your card can be reloaded easily at any time. Losing your card does not mean losing your money. The plan allows flexibility in menu choices and the freedom to construct meals to suit individual needs and preferences.

#### **MAIN CAFETERIA**

In the main café you can enjoy the variety of foods offered from the various stations, whatever your appetite may be, we are confident you will find it here:

**The Fresh Grille:** Featuring all day breakfast, traditional favourites, popular breakfast sandwiches, comfort foods, grilled entrées, vegetarian choices and many side dishes.

**Menutainment:** At lunch you can enjoy a customized stir fry, pasta bar or fajita bar all made to order as well as seasonal features such as Kung Pao and salad bar. Homemade soup is offered daily featuring a vegetarian option.

Pizza Pizza: A crowd favourite featuring 4 varieties of pizza served daily, stuffed sandwiches, chicken wings and bites.

**On The Go:** A large selection of salads, sandwiches, parfaits and desserts that are made fresh daily, as well as convenient packaged confectionary and beverages. Watch for the Balanced Choice symbol that indicates you are choosing a selection approved by the Dieticians of Canada.

**Tim Hortons Self -Serve:** Need your Timmy's fix? Enjoy the #1 coffee in the Country at the self-serve Tim Hortons contained within the cafeteria which also features tea, hot chocolate, cappuccino and baked goods.

## TIM HORTONS

What would a campus be without a Tim's? Always fresh coffee, baked goods, bagels and breakfast sandwiches. Meal plan is accepted at Tim Hortons as well as cash, debit or credit.

#### **SUBWAY**

Subway is conveniently located across from Tim Hortons where you can enjoy your sub your way as well as wraps, flabreads and fresh soup served daily.

Any questions or concerns or to talk about your food options and preferences please call the Sault College Food Service Manager at 705-759-2554 ext. 2765.

## **On-Campus Child Care**

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

An increasing number of College students have young children. Sault College Child Care services supports our students with balancing the challenges of school and family by ensuring parents have affordable, excellent quality child care on site. Children learn best through play and our Center offers a rich, play-based curriculum that builds on the interests and emerging skills of our children. Our Registered Early Childhood Educators work in partnership with our families to create a warm and nurturing environment. Our Centre is a progressive learning Lab for students in the Early Childhood Education program.

Our licensed Child & Family Centre (CFC) will provide care for your children from age 18 months to 4 years old. Our Centre is open 12 months of the year. Once enrolled in our Centre, we continue to support our families with child care after graduation as parents are entering the workforce. We offer quality Before and After School care at the St. Paul Catholic School for children ages 4-12 years old.

If you are a student parent who needs child care for your child, please place your name on our waiting list as at www.saultdaycare.ca. To contact the CFC directly, please call 705.945.0890. Spaces are limited. You can visit our Centre at Sault College. Our office is located at 550 Northern Avenue in the Prince Charles Public School (across the street from the College).

## **PRIORITIES FOR ENROLMENT**

Applicants for admission to day care are as follows:

- Full and part-time Sault College students.
- Sault College employees
- Community members/referrals.

## FEES AND SUBSIDIZED CHILD CARE

Hours & Holidays:

- We are open 7:30 a.m. to 5:30 p.m. year round.
- We are closed for all statutory and College holidays only.
- Detailed information about fees is available from the manager.
- Subsidies or financial assistance is available to families who qualify.

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## Sault College Students' Union

Section C.23 2017-06-28

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

The Sault College Students' Union (SCSU) is an organized body of students whose purpose is to serve and represent all Sault College students. SCSU is responsible for advocating for students' best interest, while treating every student with respect. SCSU also delivers a number of services including but not limited to: student employment, events, awareness weeks, photocopying and faxing, Health Plan, the Student Food bank, Chapters and Clubs and volunteer opportunities, to ensure Sault College students have a memorable college experience.

At SCSU, the Board of Directors operates under set policies and bi-laws to ensure the rights of students are upheld. Along with governance, the SCSU also provides students with opportunities to relax unwind and take a break from their studies. The Health and Wellness Centre is home to the Odeno restaurant, where students will find a comfortable, welcoming atmosphere for studying or hanging out with friends, while enjoying a delicious meal.

For more information about SCSU please visit the SCSU Office (F1200), located in the Health and Wellness Centre, call 705-759-2554 Ext. 2767 or visit our website <u>www.myscsu.ca</u>.



## Residence

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

### **RESIDENCE: RAY LAWSON HALL**

Enjoy the freedom of studying on-campus steps away from classes, labs, and athletic facilities. The Residence offers double rooms, single rooms and may offer a limited number of premium-single rooms. Four barrier-free rooms are available for students requiring accommodations. The first floor is wheelchair accessible.

Our impressive facility also houses three laundry facilities, two study rooms, three kitchenettes, and three common lounges. Storage lockers and parking spaces are available to residence students for an additional fee.

All washrooms are semi-private and residents are responsible for their cleaning. Rooms are furnished with basic necessities, but you'll want to bring your own blankets, sheets, towels, cooking utensils, cleaning supplies, and anything else that can help you feel more at home. You may also wish to buy a small fridge for your room for cold drinks, fresh fruit, and last night's take-out. The Residence Office has some available to purchase.

Residents also have a team of friendly Residence staff who assist and support you throughout your stay. The Residence Team works with students to provide a safe, respectful and fun living environment. An important part of this team are the Residence Advisors who are senior students who live in Ray Lawson Hall and are available to answer questions, provide direction and ensure that Residence community standards are adhered to.

### HOW TO APPLY FOR RESIDENCE

Residence applications will be available on the Residence website at <u>http://www.saultcollege.ca/Services/Residence</u>. Additional information is available in the offer of Admission Package.

To be assigned a room, your name will be entered into a lottery, where everyone has an equal chance of admission. If you wish to be considered in one of the first lotteries for a room, you will need to have your completed application form and application fee submitted to the Residence Office by the early-bird deadline or by the priority deadline. A confirmation of your residence accommodation will be emailed to you along with any other information you may need before the exciting journey of living on campus begins. Summer Residence accommodations are also available for students who are continuing to study during the summer months. Please contact the Residence Office for further information.

Living in Residence or participating in the Off-Campus connections program is a great way to make the most of your college experience. If you reach out and join in the fun with other students, you can have the opportunity to make friends not only from your own program, but from all programs of study, and have the opportunity to participate in activities like playing hockey, snowshoeing and jam nights. Your College days are often filled with memories that will last you a lifetime, so be sure to take a deep breath and jump in and participate – you won't regret it.

#### **RESIDENCE MEAL PLAN**

Your meal plan is a part of staying in residence, and all students living in residence will need to have a meal plan. The meal plan can be used at the Cafeteria, Tim Hortons, Subway, or Odeno (all on campus) where delicious food and balanced meals are prepared daily that you buy instead of having to spend time preparing. Our new campus pub will allow use of your meal plan as well. A form of this plan is also available to students living off-campus. The meal plan uses



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a declining balance system, i.e., the cost of the food you purchase is subtracted from the total value of the meal plan. Food provided on the meal plan is tax-free, saving you money.

## **OFF-CAMPUS HOUSING**

The Residence website provides a list of landlords interested in renting to students, including apartments and houses for rent as well as shared facilities in the landlord's private home. Many homes around the campus have home owners willing to rent out spaces to students at the College. As revised listings are available throughout the year, you can begin your search at any time. You'll want to start looking for a place to rent as soon as you confirm that you're coming to the College so you are sure to have a place to live while studying here.

It is best to see the place you'll be renting before you sign any paperwork, and talk to the landlord about the conditions of rental before making a final agreement. The Off-Campus Housing List can be found on the Residence Website at <a href="http://www.saultcollege.ca/Services/Residence/OffCampusHousingList.asp">www.saultcollege.ca/Services/Residence/OffCampusHousingList.asp</a>

## **OFF-CAMPUS CONNECTIONS**

If you decide to live off-campus, but would still like to enjoy the fun and support of residence life, you may want to take part in the community access network. It's ideal for out-of-town students living off-campus to enjoy College life with others outside the classroom. To get involved, please sign up by mid-September. Learn more at housing@saultcollege.ca or calling 705.759.2554, ext. 2684.



Advisory Committees are composed of volunteers who work in industry and who have an important role in the educational process. Generally, these are some of the ways that Advisory Committees benefit Sault College:

- Contribute to the continuing relevance of course materials to meet the evolving needs of the marketplace.
- Provide assurance that programs meet the needs of employers without being so narrowly directed that job mobility is impaired.
- Monitor the continuing suitability of College facilities and equipment.
- Participate in the College's program review process.
- Form a valuable link between the College and the community.
- Encourage programs to reflect the changing roles and needs of our society.
- Provide written reports to the Board of Governors, as warranted.

## ADVISORY COMMITTEES AND THE BOARD OF GOVERNORS

Advisory Committees report to the College's Board of Governors. The Board of Governors and President review on an ongoing basis the summary reports which include Items for Special Attention to the Board and report back to members on recommendations as requested.

The Board of Governors is also made up of volunteers from the community who meet on a monthly basis. Advocacy and Building & Finance Committees meet on a schedule determined by the Board. Given this schedule of meetings, the Board of Governors responds to all issues and concerns arising from Advisory Committees/Councils. This communication usually takes the format of a written response from the Chair of the Board of Governors and/or administrative liaison to the Committee/Council.

Many informal requests from Advisory Committees/Councils may be most appropriately and expeditiously processed by direct referral to a resource program Dean or direct communication with the College administration concerned.

Communication and information sharing between the Board of Governors and Advisory Committees also occurs within the functional and structural organization of the College.

#### MEMBERSHIP

Usually, Advisory Committees have 5 to 12 members appointed by the Vice-President Academic. Members are recommended for appointment by Governors, Advisory Committee members, or College faculty and staff.

Advisors may be drawn from the local area or from elsewhere in Ontario or Canada. The location(s) of employment opportunities will influence where Advisors are sought.

Members of Advisory Committees are employers and potential employers of graduates, people actively working in a program-related occupation, professionals, trade and business organization representatives, educators, and government employees.

## STAFF, FACULTY, AND STUDENT PARTICIPATION

The College is represented by the Dean of the program cluster as an ex-officio committee member. Other staff members and students may serve as resource people on an ad hoc or support basis. The utilization of resource members in staff and students is strongly recommended on a regular basis. Further, the practice of inviting recent program graduates to Advisory Committee meetings has proven to be beneficial and is accordingly encouraged.

## A. DEFINITION OF TERMS

#### Course

A specific component of a subject area (i.e. CMM110)

### **Full-time Student**

A full-time student is defined as follows:

- a) Proceeding towards a diploma or certificate;
- b) Registered in a program offered by Sault College; and
- c) Taking at least 70% of the required credits or 66 2/3 of the required courses for the program of instruction in a given semester. Students enrolled in the Collaborative Bachelor of Science Nursing program must take 12 or more program related credits per semester.

### **Ontario College Certificate**

An Ontario College Certificate is generally awarded on the successful completion of a program of two semesters.

### **Ontario College Diploma**

An Ontario College Diploma is generally awarded on the successful completion of a program of four semesters.

#### **Ontario College Advanced Diploma**

An Ontario College Advanced Diploma is generally awarded on the successful completion of a program of six semesters.

#### **Ontario College Graduate Certificate**

An Ontario College Graduate Certificate is generally awarded on the successful completion of a program of two semesters of advanced studies.

#### **Part-time Student**

A part-time student is one who is registered in College courses totaling less than 70% of the required credits and fewer than 66 2/3 of the required courses for the program of instruction in a given semester. Students enrolled in the Collaborative Bachelor of Science – Nursing program will be part-time if they enroll in less than 12 program related credits per semester.

#### Program

An organization of courses and related learning experiences leading to a recognized educational objective, which, when successfully obtained, qualify a student to receive a Sault College credential.

#### Semester System

A semester runs approximately 15 weeks. Students wishing to undertake a diploma or certificate program enter Sault College in the fall semester, commencing in late August or early September of each year. However, new applicants may be admitted in the winter semester, commencing in January of each year or in summer semester commencing in May of each year. For further information regarding start dates, contact the Registrar's Office.

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## **B. EVALUATION**

At the beginning of each semester, faculty will provide students with a course outline that will clearly identify the criteria they will use in assessing the student's work. Such criteria may include an attendance requirement. Faculty may also include requirements concerning the completion of assignments on time and will also give students a schedule of tests and/or final examinations in relation to overall assessment for the course.

Other criteria may be included dependent upon the nature of the course being taught.

An overall grade point average of 2.0 is required for graduation. Specific programs may require students to achieve grade competencies higher than those required by the stated grading policy. Students will be advised of this standard as part of the course outline.

## C. GRADE POINT AVERAGE (GPA)

The grade points earned in each subject are established by multiplying the number of credits by the numerical equivalent of the grade earned in that subject.

The grade point average is determined by dividing the total grade points earned by the total number of credits attempted.

The grade point average for the semester will be computed at the end of each semester. An accumulated program grade point average will be computed for each program in which a student registers and will be shown on the transcript.

Credit for work taken at other institutions is not included in the grade point average.

## D. COURSE DROPS/ADDS

Courses may be dropped and/or added to students' timetables, subject to the approval of the Chair/Dean according to the drop/add deadlines identified in the Key Dates Calendar for each semester. Failure to officially drop a course by the specified deadline date will result in an "F" grade assigned for that course.

## **E. TRANSCRIPTS**

Final grades are available on the Student Portal at the end of each semester. Any errors or omissions on grades issued must be reported to the Registrar's Office within four weeks from their date of issue.

Official transcripts (the student's accumulated academic history record) will be sent, upon written request to agencies, institutions, or employers at a cost of \$8 per copy. The College will not release transcripts or grade reports to students who have not met their obligations to the College. Please visit the <u>www.saultcollege.ca/alumni</u> to order a transcript.

## F. ACADEMIC PROGRESS AND GRADING

## PURPOSE:

This policy provides the standard for grade assessment in a credit course and progress through an academic program.

## SCOPE:

This policy applies to students enrolled in credit courses and/or a program in the following: Postsecondary, Continuing Education, Adult Training and Apprenticeship.

This policy will address academic progress, grade assessment, deferred grades ("X"-grades), failing grades and grade improvements.

### DEFINITION

### Grading Legend

Grade	Definition	Grade Point Equivalent	
A+	90-100%	4.00	
Α	80-89%		
В	70-79%	3.00	
*C	60-69%	2.00	
*D	50-59%	1.00	
F (Fail)	49% and below	0.00	
CR (Credit)	Credit for graduation requirements has been awarded.		
S	Satisfactory achievement in field /clinical placement and/or		
	non-credit courses.		
U	Unsatisfactory achievement in field/clinical placement		
	and/or non-credit courses.		
Х	A temporary grade limited to situations with extenuating		
	circumstances denoting incomplete course requirements		
	within the prescribed course timeframe.		
NR	A temporary grade assigned when a final grade is not yet		
	reported.		
W	Student has withdrawn from the course without academic		
	penalty.		

\*Due to varying program standards, some courses may require a higher passing grade. A passing grade in a course in one program may not be considered a passing grade in that course in another program.

## PROCEDURE:

## Student Assessment

The College grading and reporting system informs students of their academic performance.

The academic transcript is the official College record which represents the complete academic history of a student at Sault College and includes final grades from all courses attempted.

The course outline identifies the program and/or course learning outcomes, method of evaluation and minimum passing grade requirements.

## **Deferred Grades**

1. A student may be assigned a temporary "X" grade in a credit course due to extenuating circumstances. Illness, bereavement or unavoidable delays in completion of credit course requirements may constitute reason for the assignment of an "X" grade.

2. Students will present their request for an "X" grade to the faculty member teaching the course. The faculty member has discretion to determine if there are extenuating circumstances to warrant deferring of the grade. If the timeline for the deferral is beyond 60 calendar days, the faculty will consult with the Dean/Chair of the program and the Dean/Chair will determine the deadline date. It is important to note that typically the maximum time for completion is the end of their next regularly scheduled academic semester.

3. An "X" grade contract must be submitted to the department Dean/Chair no later than the grade submission date.

4. The onus is on the student to adequately complete this work by the agreed-upon date. The onus is on the faculty member to submit the final grade to the Dean/Chair for inclusion on the student's transcript.

5. Where a student has received an "X" grade in a prerequisite course, entry to the next course will be determined by the department Dean/Chair on an individual basis. This will be noted on the "X" grade Contract. However, if the student is allowed to enrol in the requisite course and subsequently fails the prerequisite, they will be withdrawn from the requisite course.

6. Students will not be allowed to continue in requisite clinical courses while in process with the prerequisite course (as in Health programs) and some field placement courses. This will be determined by the Dean/Chair of the program in consultation with the faculty and be noted on the "X" grade Contract.

## Failing Grades

This procedure addresses situations where a student receives "F" grades (failures) in prerequisite courses, multiple "F" grades within one course or multiple "F" grades within a program.

Failing Grades	Process	Outcome
Prerequisite Courses		
"F" grade in a prerequisite	Student meets with	Will not be registered for
course	Coordinator	requisite course
Failing Grades in Same		
Course		
First "F" grade in course	Student meets with	Academic advising to
	Program/Academic	ensure graduation
	Assistant or	requirements can be met
	Coordinator	
Second "F" grade in same	Student meets with	Academic advising for
course	Coordinator	collaborative success
		planning
Third "F" grade in same	Student meets	Academic plan identifying
course	with Dean/Chair	behavioural and learning
		performance expectations.
		Specific course and
		program restrictions may
Fourth "F" and a in some	Ctudant in	apply.
Fourth "F" grade in same	Student is	Dean/Chair will have
course	involuntarily withdrawn from	discretion to grant
		approval for re-entry into the course according to
	course	individual extenuating
		circumstances. A written
		academic plan is a
		requirement of re-
		registration.
Failing Grades in Program		
Two "F" grades in same	Student meets with	Academic advising for
semester	Coordinator	collaborative success
		planning
Three or four "F" grades in	Student meets with	Academic advising for
same semester	Dean/Chair	collaborative success
		planning
Five or more "F" grades in	Dean/Chair issues	Dean/Chair will have
same semester	College Initiated	discretion to grant
	Program	approval for re-entry into
	Withdrawal;	the program according to
	notification	individual extenuating
	provided to student	circumstances. A written
	with re-entry	academic plan is a
	process	requirement of re-
		admission.

## Grade Improvement

When a course has been repeated, the highest grade achieved will be used in computing the program grade point average (GPA).

## Academic Progress

This procedure addresses students enrolled in certificate and diploma programs as they progress to graduation. The following definitions will be posted on the student portal for reference.

## In Good Standing

A student will be considered in good standing when they are eligible to continue or return to the program in the subsequent semester of that program. All courses attempted in the current semester are completed successfully.

## Academic Probation

A student will be considered on academic probation and at risk of not meeting graduation requirements if their program GPA is below 2.0 or higher where program specific standards exist.

Individual programs may have additional requirements as reflected in program guides and course outlines.

## Candidate for Graduation

In order to progress through a program and graduate, students must satisfy all program graduation requirements and have a minimum program GPA of 2.0 or higher where program specific standards exist.

## <u>Dismissal</u>

A student will be considered for dismissal if their academic performance is not acceptable for continuation in the program (*five or more "F" grades*). Policies and/or procedures specific to programs or student code of conduct may also result in dismissal as stated in program guides/operating procedures or course outlines. The Dean/Chair will have the discretion to grant approval for re-entry into the program according to the extenuating circumstances surrounding an individual student's situation.

## Appeals

All decisions regarding promotion and graduation are subject to appeal.

## Academic Progress in Through-Way Programs

The Dean/Chair will have the discretion to permit a student to advance to the diploma from certificate or from a diploma to advanced diploma level of their program even if the conditions of graduation from that certificate or diploma have not been achieved due to a failing grade, low GPA or missing course. The Dean/Chair will provide the student and Registrar's Office with written confirmation of their approval and the conditions therein.

## G. OUTSTANDING OBLIGATIONS

Students who have not met all of their obligations to the College are not entitled to receive transcripts, certificates, diplomas, etc.

Students are asked to meet obligations by: returning books to the Library and paying all fines, paying total tuition fees, returning all lab and athletic equipment, and clearing any outstanding debts with Residence or Financial Aid. Failure to do so will result in records or documents being withheld.

## **H. REQUIREMENTS FOR GRADUATION**

## PURPOSE:

The purpose of the Graduation Requirements Policy is to provide eligibility guidelines to the academic schools through the Vice President, Academic for graduation from post-secondary programs. You must be registered in the program for which you are attempting to qualify for the credential, or have one credential and register for additional courses to meet the qualification for the additional credential.

## SCOPE:

This policy applies to all post-secondary students who have completed a program of study and wish to graduate. It is the responsibility of the Registrar's Office to assess a student's achievement against these program graduation requirements and any other approved requirements of the specific program and to certify eligibility to graduate.

## **PRACTICE:**

Graduation eligibility will be assessed against the program graduation requirements as approved by the academic school in compliance with the Ministry of Advanced Education and Skills Development Framework for Programs of Instruction and Program Standards, where applicable. Eligibility requirements include:

1. A student's graduation eligibility will be assessed against the program graduation requirements in effect in the year of first enrolment in or re-admission to the program.

2. A student who takes longer than seven (7) years from the date of first enrolment to complete a program must have her/his transcript evaluated by the program Chair for relevance to current program performance objectives and may be required to make up additional requirements to meet graduation eligibility requirements.

3. A student must complete at least 25% of the senior level program credits at Sault College to be eligible to receive a Sault College certificate or diploma.

4. A student must achieve a minimum grade point average of 2.00 to receive a Sault College certificate or diploma.

5. An "honours" graduation diploma is issued to students who achieve a grade point average of 3.75 to 3.99 and have met all other post-secondary program requirements.

6. Graduation "with distinction" will be accorded to those students who have met all post-secondary program requirements and achieved a 4.00 grade point average without a repeat course.

7. You must be registered in the program for which you are attempting to qualify for the credential, or have one credential and register for additional courses to meet the qualification for the additional credential.

## Convocation

Section C.27 2017-06-26

SAULT

COLLEGE

705.759.6700 : 1.800.461.2260 : www.saultcollege.ca : Sault Ste. Marie, ON, Canada

The moment you are waiting for – crossing the stage at graduation. Certificates/diplomas are awarded at a formal graduation ceremony to those students who have successfully completed the requirements of their program.

If you cannot attend convocation, the Registrar's Office will mail your certificate or diploma to you at the address we have on file for you.

The College reserves the right to withhold a certificate or diploma, transcripts and grades from any candidate who has not met all outstanding obligations to the College.

Students who wish a duplicate or replacement certificate/diploma may request one in writing and will be charged a \$25 replacement fee.

### FEES

The tuition fee for international students (sometimes called visa students or non-resident students) for 2017/2018 ranges between \$15,000 to \$17,000 (in Canadian Funds) depending on which program you apply to per academic year (subject to change and includes a non-refundable administration fee, please refer to the Colleges refund policy for details). Some compressed programs may have higher tuition fees. Tuition fees for the academic year must be paid in full prior to registration.

The average cost for books and supplies is approximately \$1,200 per year. This cost is not included in the tuition fee. Some programs have significantly higher costs for books and supplies.

For admission procedures and application fee information, see Admission Procedures, Section I. of this program guide.

## **MEDICAL INSURANCE**

International Students are covered by a Health Insurance plan provided by Guard.me, coverage begins based on your start date of your program and runs until you graduate. Some of the many benefits of this plan are: up to 100% eligible coverage for Emergency Hospital Visit, X-Rays, some Lab Testing, Eye Exams, Ambulance, Prescription Drugs, Dental – Accidental Injury and Dental – Emergency to list a few. The student is covered worldwide, except in their home country. For more information about this great coverage, visit <u>www.guard.me</u>

#### HOUSING

International students can stay in the Sault College residents or choose to live off-campus. If a student chooses to live on campus, Sault College will assist the student with their application.

If a student chooses to live off-campus Sault colleges provides access to housing searches and advice on convenient areas to live, in relation to both Sault College and essential shopping areas. Sault College also helps to set-up tours of houses and may advise students on appropriate housing costs for the area and type of house (Shared, Private etc). Sault College will assist the student to find temporary housing when they first arrive, and assist them in moving into a more permanent housing option when one is found. While Sault College does not endorse individual landlords, Sault College may introduce international students to landlords who have given prior international students a positive impression.

#### **Student Residence**

Information about the on-campus student residence may be found in the table of contents under "Residence."

#### LIVING EXPENSES

Food and housing expenses vary depending on choices and personal preference but it is recommended that students plan for living expenses of \$600 - \$750 per month. Bus passes are available for \$160/semester. Personal and miscellaneous costs may be approximately \$1,000 per year. As the winter in Sault Ste. Marie can be cold, warm clothing is a necessity.



### **IMMIGRATION REGULATIONS**

The student must obtain a valid study permit from the Government of Canada prior to coming to Canada. Citizen and Immigration information is available at <u>www.cic.gc.ca</u>. Remember: Visitors cannot become students from within Canada. The Canadian Consulate or Embassy in the student's own country will provide the necessary information for the study permit and visa.

## Off-Campus Work Permit (OCWP) – Please note this process is subject to Citizenship and Immigration Canada (CIC) changes.

As of June 1<sup>st</sup> 2014, all international students with a valid study permit are able to work part-time off-campus 20 hours per week and full time during scheduled breaks.

## Eligibility

According to CIC, to be eligible to work Off-Campus Work Permit, students must meet ALL of the following criteria:

- have a valid study permit
- be registered as a full-time student at Sault College

## **TRANSFER OF FUNDS**

There are a couple of ways to pay for College, a bank transfer (sometimes called a payment order or mail transfer) is the simplest way to transfer funds from any country to Canada. Students can also pay via credit card (Visa/Mastercard) by calling 1-705-759-2554 Ext: 2300 or by cheque payable to Sault College. If you do send a cheque, please include your full name and student number.

Alternatively to make a wire transfer please read the following:

Bank Royal Bank of Canada 602 Queen St. East Sault Ste. Marie, ON P6A 2N4 Canada

Account # 1375039 SWIFT – ROYCCAT2

Receiver Information: The Sault College of Applied Arts & Technology 443 Northern Avenue Sault Ste. Marie, ON P6B 5L3 Canada

If you chose to use the wire transfer option please ensure that you submit your complete name and student number.

"Coming to Sault College has been the most enriching experience of my life. Despite being an International student, it did not take me much time to settle down here since the staff and teachers are always helpful. I strongly recommend Sault College to anyone who wants to access an ocean of knowledge."

- Esha Ramtahal, International Student, 2017 Sault College graduate and present Sault College employee

### **REGISTRATION FORMS**

Under the Federal Privacy Act, individuals can request access to their own individual information held on federal information banks, including those held by Statistics Canada.

### **CALENDARS AND/OR WEBSITE**

Notification of Disclosure of Personal Information to Statistics Canada

Statistics Canada is the national statistical agency that carries out hundreds of surveys each year on a wide range of matters, including education.

It is essential to be able to track students and allow institutions to understand the factors affecting enrolment demand at post-secondary institutions. The increased emphasis on accountability for public investment means that it is also important to understand 'outcomes'. In order to conduct such studies, Statistics Canada asks all colleges and universities to provide data on students and graduates. Institutions collect and provide Statistics Canada with student identification information (student's name, student ID number, Social Insurance Number), student contact information (address and telephone number), student demographic characteristics, enrollment information, previous education, and labor force activity.

The Federal Statistics Act provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information from being released in any way that would identify a student.

Students who do not wish to have their information used can request to remove their identification and contact information from the national database by contacting Statistics Canada. Statistics Canada will delete an individual's contact information (name, address, or other personal identifiers) from the PSIS database. To make such a request, please contact:

Institutional Surveys Section Centre for Education Statistics Statistics Canada, 150 Tunney's Pasture Driveway Ottawa, Ontario K1A 0T6 statcan.psis-siep.statcan@canada.ca

Monday - Friday 8:30am - 4:30pm EST/EDST

1-800-263-1139 (Toll Free)

