



PROGRAM OVERVIEW

Are you interested in a unique opportunity to study microelectronics in both the U.S. and Dubai?

By undertaking a degree in microelectronics at RIT, you'll have the unique opportunity to get to grips with the basics of a complex engineering area by studying in Dubai for the first two years, followed by three years specializing at RIT in New York, including 50 weeks of cooperative education. You'll benefit from a cooperative internship placement at a company in the U.S. or abroad for a year, putting the theory you have learnt at RIT Dubai and RIT to the test.

Throughout the program you'll learn how to successfully use ideas from many disciplines. Your studies will provide you with a comprehensive interdisciplinary background in electrical and computer engineering, solid-state electronics, physics, chemistry, materials science, optics, and applied math and statistics necessary for success in the semiconductor industry.

Our faculty is committed to quality engineering education, state-of-the-art laboratories, strong industrial support, co-op opportunities with national companies, and small class sizes, all of which make this one of the most rewarding programs in the country.

The fabrication of semiconductor devices and systems through microelectronics technology is a key driver of the world economy and the semiconductor industry is a shining example of U.S. manufacturing capability. The RIT NY campus developed the first bachelor of science degree program in microelectronics engineering in the U.S., and the college continues to provide highly educated and skilled design, process, yield enhancement and test engineers for industry.

ACCREDITATION

The Bachelor of Science in Microelectronics Engineering at RIT New York is accredited by the EAC Accreditation Commission of ABET.



Engineering
Accreditation
Commission



"Studying the Bachelor of Science in Microelectronics Engineering has been a unique experience that has set me up for a successful career in a very unique and constantly evolving sector. The opportunity to study at RIT's New York campus and put theory into practice during extensive co-operative internship placements is what made the program stand out for me."

Jebran Sayeed

POSSIBLE CAREER OPTIONS

Microelectronics arguably employs the most highly-trained engineering workforce out of any manufacturing industry. You'll be perfectly placed to meet demand as the sector innovates the complexity of the fabrication processes increase and the density of integrated circuits rises.

Microelectronics Engineering - Bachelor of Science Degree, Typical Course Sequence

Course		Semester Credit Hrs.	Course		Semester Credit Hrs.
FIRST YEAR			THIRD YEAR		
MATH - 181	Project-Based Calculus - I	4	MCEE - 205	Statistics and Design of Experiments	3
MATH - 182	Project-Based Calculus - II	4	MCEE - 320	EM Fields	3
CHMG - 131	General Chemistry for Engineering	3	MCEE - 201	IC Tech	3
PHYS - 211	University Physics - I	4	MCEE - 502	VLSI Process	3
UWRT - 150	Writing	3		Free Elective	3
	Perspective - 1, 2, 3	9	EEEE - 380	Analog Electronics	4
ANTH - 365	First Year Seminar: Islamic Culture	3	EEEE - 480	Digital Electronics	3
EEEE - 105	EE Practicum	1	EEEE - 353	Linear Systems	4
EEEE - 120	Digital System	3		Cooperative Education (Summer)	Co-op
SECOND YEAR			FOURTH YEAR		
MATH - 221	Multivariable Calculus	4	MCEE - 503	Thin Films	3
MATH - 231	Differential Equations	3	MCEE - 505	Lithography Materials	3
PHYS - 212	University Physics - II	4		Professional Elective	3
PHYS - 213	Modern Physics	3		Immersion - I	3
CMPR - 271	Computational Problem Solving	3		Cooperative Education	Co-op
EEEE - 260	Semiconductor Devices	3	FIFTH YEAR		
EEEE - 281	Circuits - I	3	MCEE - 495	Senior Design - I	3
EEEE - 282	Circuits - II	3	MCEE - 496	Senior Design - II	3
	Perspective - IV	3	MCEE - 550	CMOS IC	4
EEEE - 220	Digital Systems - II	3	MCEE - 515	Nanolithography Systems	3
				Free Elective	3
				Professional Elective	3
				Immersion - II, III	6
Total Semester Credit Hours - 129					

COOPERATIVE EDUCATION (Internship)

By studying at RIT Dubai you'll undertake a 50 week, full-time, paid cooperative internship placement as part of your program. You'll spend time honing your skills in a professional environment - and as a Bachelor of Science student, you can choose the unique experience of conducting a placement abroad. Many students end up working for the company where they did their placement.

MINORS (Examples)

- » Industrial Engineering
- » Mechanical Engineering
- » Computing Security
- » Networking and Systems Administration
- » Business Administration

R·I·T Dubai

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