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Paris | Évry-Courcouronnes

ÉCOLE NATIONALE
SUPÉRIEURE
D'INFORMATIQUE
POUR L'INDUSTRIE
ET L'ENTREPRISE

INITIAL ENGINEER TRAINING IN COMPUTER SCIENCE

THEMATIC COURSE

APPLIED MATHEMATICS

ALEATORY PATTERNS FOR FINANCE
QUANTITATIVE METHODS AND STATISTICS OPTIMISATION
DATA SCIENCE
OPERATIONAL RESEARCH

CONTACT

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PARTNERS

NATIXIS
SOCIÉTÉ GÉNÉRALE
EDF
ENGIE
CRÉDIT AGRICOLE
SNCF
AIR FRANCE
AXA

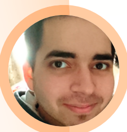
ALEXANDRE DAMOUR

PROMOTION 2013

DOUBLE DEGREE ENSIIE – MASTER M2IF FINANCIAL ENGINEERING UNIVERSITY PARIS-SACLAY

CTO and co-founder of QuantCube Technology

« This course taught me how to use my technical skills in order to start my own company. »



MEHDI KACI

PROMOTION 2017

DOUBLE DEGREE ENSIIE – MASTER MPRO OPERATIONAL RESEARCH UNIVERSITY OF PARIS-SACLAY

Optimisation Engineer at EURODECISION

« Today, I am an Optimisation Engineer, in mission at the Operational Research department of Air France. »

JOBS OPPORTUNITIES

Data analyst
Risk manager
Operational research engineer
Quantitative analyst
Financial engineer
Statistics engineer

EXAMPLES OF INTERNSHIPS

Quantitative analysis assistant
HSBC
Market risks analyst
Responsible for statistical studies - datamining
Machine learning
Structured products pricing officer

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INITIAL ENGINEER TRAINING IN COMPUTER SCIENCE

THEMATIC COURSE
APPLIED MATHEMATICS

This course aims to form engineers with triple skills: computer science, probabilities and statistics, with their industrial and commercial applications (finance, insurance, data science, machine learning), and operational research. This two-year course starts from the 1st semester of the 2nd year (S3) with fundamental mathematics teachings turned toward applications. This first year is a double degree with the M1 of Applied Mathematics of Paris-Saclay University and is a preparation for a last year of specialization, which is, most of the time, a double degree with a university M2. The course speakers come from academical field as well as from companies to offer a complete professional education to the students.

S3

Computer Science Project and Agile Methods
Stochastic Process
Regularised Regression Model
Advanced Programming and Project
Data Analysis
Operational Research

S4

Simulation Methods
Analysis of PDE
Statistical Modelisation
Stochastic Calculation
Introduction to Financial Markets or Operational Research
Research Project or Pattern Recognition and Biometrics
Python for Data Science or Quantitative Methods and Statistics
Advanced Statistic Modelisation
Modelisation and Stochastic Control
Stochastic Calculation
Research Project or Pattern Recognition and Biometrics

S5

Python for Data Science or Quantitative methods and statistics
Advanced Statistical Modelisation
Modelisation and Stochastic Control
Numerical Methods in Finance
Financial Instruments
Machine Learning
Advanced Stochastic Calculation

DOUBLE DEGREE

Bachelor in Mathematics
Évry Val d'Essonne University

M1 **Applied Mathematics**
Paris Saclay University

M2 DEGREES COOPERATED WITH PARIS-SACLAY UNIVERSITY

Master TCSC **AIC**
Traineeship, Computer Science and Content

Master **MPRO**
Operational Research

Master **DATA SCIENCE**
Health, Finance, Insurance

Master ITDE **TRIED**
Information Treatment and Data Exploitation

M2 IN PARTNERSHIP WITH PARIS-SACLAY UNIVERSITY

Master IMDS **IMSD**
Innovations, Markets and Data Science

Master MRA **GRA**
Management of Risks and Assets

Other degrees are possible with foreign universities.