

GRADUATE PROGRAMME

INTAKE: **September**
CAMPUS: **Paris**
LANGUAGE: **English**



In-depth understanding and ethical awareness in data and AI

Established
in Paris in

1919

4,000
students

+160
international
academic partners

350
teachers
and professional
lecturers

15,000
graduates

+800
corporate partners
and public
organizations

+40
students
associations

Established in 1919, ECE Engineering School in Paris excels in tech and digital education. Specializing in software development, network architecture, cybersecurity, data and AI, our educators use project-based pedagogy to enhance learning. As part of the OMNES Education Group, a top private institution in France, ECE leads in innovation and academic excellence.

In an era of escalating data volumes and rapid advancements in AI technology, businesses and organizations seek professionals adept at collecting, storing, analyzing and leveraging data, along with artificial intelligence, for valuable insights.

In response to the rising demand for skilled professionals, this programme offers comprehensive training to students. It equips them with essential skills in understanding the complexities of both fields, mastering key tools for data handling and creating advanced AI models.

Moreover, the programme focuses on enhancing students' communication skills to effectively convey data analysis findings. By providing this multifaceted training, the programme aims to empower students in making informed decisions. Ultimately, this approach ensures students are well-equipped to navigate the dynamic landscape of data management and AI.

CAREER OPPORTUNITIES

After finishing this program, students will be skilled professionals ready to fulfill the requirements of businesses, organizations and the public sector. They'll be equipped for various career paths such as data engineer, data architect, AI data analyst, deep learning scientist, machine vision engineer, chief data officer, data protection officer, research scientist or IT consultant.

WHY CHOOSE THIS PROGRAMME

> This programme addresses the basics of databases, information systems, machine and deep learning,

data engineering and analytics, mathematics for data science and business intelligence. It also addresses the ethics of AI.

- > Through conferences, site visits and projects, students meet with data and AI professionals, thus building their networks.
- > Courses are held on ECE's campus, centrally situated in Paris, near iconic landmarks such as the Eiffel Tower and the Seine River.
- > Students dive into data and AI, applying theoretical knowledge and discussing analyses with industry leaders.
- > Upon culmination of the programme, students may be conferred with a Bac+5 level diploma adorned with the prestigious MSc – Master of Science label accredited by the Conference of Grandes Écoles.
- > Students can obtain the international certificate Microsoft Power BI Data Analyst (PL-300).

THE OBJECTIVES OF THE PROGRAMME

Our graduates will be able to:

- > Understand the issues and challenges of data management and AI.
- > Master the tools and techniques of data management.
- > Develop AI models.
- > Communicate data analysis results to stakeholders.

LyRIDS RESEARCH CENTER



The ECE research center is pioneering an innovative strategy to enrich its pedagogy, providing students with insights into scientific, societal and environmental issues, particularly in AI-related fields such as health, energy, transportation, finance and the environment. This approach aligns with the School's majors and encompasses a broad spectrum of scientific disciplines, focusing on three key areas: Intelligent Communicating Systems, Mathematical Methods and Nanosciences.



Programme structure

ENROLL OUR PROGRAMME



Applications from French or international students residing in France



Applications from international students residing outside France

The international admission procedure only applies to you if you are not a French national and live outside France.

CERTIFICATION



YEAR 1
Semester 1 – 30 credits
Advanced Databases
Data Visualization
Initial Python
Data Science with Python
Operating Systems
Introduction to Machine Learning
Big Data Framework
Master Class, Team Management, Budget Management, Sustainable Development
French courses FLE
Multidisciplinary Team Project
Semester 2 – 30 credits
Mathematics for Data Science
Information Systems Management
NoSQL Databases
Advanced Machine Learning
Cloud Computing
Functional Programming
Data Integration
Individual Relationship Management, Social Dialogue, Corporate Management, Marketing in a Digital World, Manager Ethics
French courses FLE
Multidisciplinary Team Project
4-month internship (optional)

YEAR 2
Semester 3 – 30 credits
Big Data Ecosystem
Data Analytics with Spark
Business Intelligence
Data Analytics
Real Time Big Data Search
Mastering Machine Learning
Deep Learning
Ethics of AI
Cybersecurity
Change Management, Workplace Health, Fundamentals of supply chain management, Safety and Security, Job Interview Simulation
French courses FLE
Research Writing, Final Project
Dissertation – 20 credits
6-month internship – 10 credits



A Corporate Social Responsibility Policy to embody the commitments of OMNES Education

The societal challenges of the contemporary world require new skills, new responsibilities and new professions, which OMNES Education aims to provide to its student audience. With a resolutely humanistic and universalist approach, OMNES Education seeks to unlock the abilities and aspirations of each individual through an innovative and multidisciplinary study programme.

ENTRY REQUIREMENTS

- > A first-class undergraduate degree with honors in mathematics (covering calculus, linear algebra and statistics) and computer science (covering programming, data structures and algorithms), with some exposure to databases or information systems preferred.
- > English proficiency: the minimum score required is the upper intermediate B2 level, 4th level of English in the Common European Framework of Reference (CEFR).

TUITION FEES

- French or international students residing in France**
- > 10,700 €/academic year.
- > An application fee is payable at the time of the application submission: 90 €.
- International students residing outside France**
- > 11,190 €/academic year.
- > An application fee is payable at the time of the application submission: 50 €.