

# MSc ARTIFICIAL INTELLIGENCE

January 2025

## **GRADUATE PROGRAMME**

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



## Empower the future with state-of-the-art Al expertise

Established in Paris in

1919

**4,300** 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, cyber-security, 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.

With AI technology evolving rapidly, companies are focusing specifically on artificial intelligence to drive innovation. The MSc Artificial Intelligence is a highly specialized programme tailored to students who want to dive deeply into the world of AI, without focusing on broader data handling.

This programme focuses on key Al technologies such as machine learning, computer vision, and neural networks. It trains students to build advanced Al systems, emphasizing problem-solving through Al rather than broader data management. The goal is to equip students with the skills to design, implement and optimize Al-driven solutions that have a transformative impact.

In addition, the curriculum enhances students' ability to communicate complex AI concepts to non-technical stakeholders, preparing them to lead AI projects and innovations. This focus ensures that graduates are prepared to thrive in the AI sector, where technical precision and clear communication are both vital.

## **CAREER OPPORTUNITIES**

After finishing this programme, 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 Artificial Intelligence Consultant, Global Technology Innovation Lead, Al Solutions Architect, Process Automation Expert, Al Developer, Al Strategy Consultant or International Al Governance Specialist

## WHY CHOOSE THIS PROGRAMME

> This programme offers a comprehensive curriculum covering ley areas of AI, including machine learning, deep learning and ethics.

- > Students also explore advanced topics such as advanced architectures and technologies and innovation strategies.
- The programme goes beyond academics, with opportunities for students to engage directly with Al professsionals through conferences, site visits and hands-on projects, allowing them to build valuable industry connections.
- > Courses take place on ECE's centrally located Paris campus, near iconic landmarks such as the Eiffel Tower and the Seine River, offering students a vibrant learning environment.
- > Upon completion, graduates receive a Bac+5 level diploma, accredited with the prestigious MSc - Master of Science label from the Conference of Grandes Écoles, positioning them for success in the AI field.
- > Students can obtain the international Certification CAPM (Certified Associate in Project Management) by PMI.

### THE OBJECTIVES OF THE PROGRAMME

Our graduates will be able to:

- > Develop Artificial Intelligence strategies by leveraging technological leadership.
- > Design Al architectures by integrating concepts and innovations.
- Manage AI projects using agile methodologies and incorporating change management approaches.
- > Lead international teams and stakeholders, optimizing collaboration and meeting global expectations.

### INTELLIGENCE LAB



The Intelligence Lab at ECE Paris, is a pioneering platform in France dedicated to AI education, research and innovation. It focuses on generative AI and large and

small language models (LLMs/SLMs), providing students with hands-on experience through practical projects and access to high-performance computing resources. The lab emphasizes collaboration between students, industry professionals and academic partners, aiming to drive cutting-edge Al developments while offering opportunities for companies to engage in innovative Al-driven projects and talent recruitment.



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## **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



	ECTS
YEAR 1	60
IT Transformation	
Digital Transformation and Business Models	3
Digital Ecosystem and Regulation	2
Information Systems Design	3
Digital Innovation	
Exploration of Disruptive Technologies	3
DevOps Practices and Continuous Integration	3
Information Systems Architecture and Performance	3
Internet of Things and Connected Systems	3
Blockchain and Crypto Economy	2
IT Project Management and Innovation	
Project Management Basics	3
Data Science Project Management with Python	3
Applied Artificial intelligence	
Foundations of Machine Learning and Data Science	4
Introduction to Computer Vision	4
Data Analysis and GenAl	4
Managerial Innovation Serving Leadership	
Innovation and Digital Entrepreneurship	3
Management of Multicultural and Distributed Teams	3
Strategic Communication	3
Today's Challenges and Future World Transformatio	ns
Green IT and Digital Sustainability	4
Ethical Issues and Societal Impacts of Emerging Technologies	3
Foreign Language	
French courses FLE	4
4-month internship (optional)	

	ECTS
YEAR 2	90
Advanced Architectures and Technologies	
Generative Al and Diffusion Models	4
Multi-LLM Architectures and Eco-Responsible Al	4
Distributed Systems and Cloud Computing in Al	4
Al Innovation Strategies	
Emerging Technologies in Al	4
Al for Transformation and Interoperability	3
Digital Ecosystems and Innovation Platforms	4
Today's Challenges and Future World Transformat	ions
Ethics of Digital Technologies	1
Impact and Regulation of Artificial Intelligence	2
Security and Data Protection in Artificial Intelligence	2
Al Solutions and Scenario Implementation	
Language Models and Business Applications	5
Computer Vision for Industry 4.0	5
Al for Business Process Automation	4
Managerial Innovation Serving Leadership	
Intercultural Leadership and Team Management	3
Communication and Innovation Management	3
Job Interview Simulation	1
Al Project Management and Innovation	
Applied Agile and Risk Management	4
Project Management Certification - CAPM by PMI	2
Master Thesis Methodology	1
Foreign Language	
French courses FLE	4
Dissertation	20
6-months internship	10

## TIME TO ACT

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 basic programming (Python, Java, or C++), algorithms and data structures, fundamentals of Al and machine learning (neural networks, algorithms), basic applied mathematics (statistics, calculus, linear algebra).
- > 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

- > 11,750 €/academic year.
- > An application fee is payable at the time of the application submission: 90  $\ensuremath{\varepsilon}.$

## International students residing outside France

- > 12,540 €/academic year.
- > An application fee is payable at the time of the application submission: 50 €.















