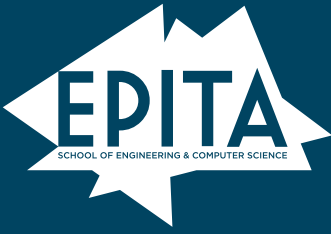


# MASTER of Science in Artificial Intelligence Systems



- ▶ Endorsed by French & international companies
- ▶ A combination of mathematics & programming
- ▶ Learning through doing
- ▶ Multi-cultural educational environment
- ▶ Accredited by the CGE (Conférence des Grandes Écoles)



In Paris



100% English



18 months full-time



2 Intakes Sept/March

## The Master of Science in Artificial Intelligence Systems

program provides high-level executives with high employability rate in the fields of Artificial Intelligence and Data Science with broad professional skills, both scientific and technological, as well as management and business acumen.

- + Open-mindedness and curiosity facilitating the understanding of economic phenomena related to globalization
- + French socio-economic and socio-professional culture,
- + Ability to present and defend a project in a variety of complex contexts



### Program

Semester 1 (S1)	Semester 2 (S2)	Semester 3 (S3)	Semester 4 (S4)
Foundation	Core	Excellence	Internship
30 ECTS	30 ECTS	30 ECTS	30 ECTS
12 Months			6 Months
On Campus			In a Company

## Learning Objectives

The heart of this training program is to train international and French graduates in solving complex problems using methods, techniques, and tools of artificial intelligence by gaining a solid background in mathematics and programming skills.



- ▶ Data Scientist
- ▶ Data Engineer
- ▶ AI Project Manager
- ▶ AI Coach
- ▶ AI Solution Architecture
- ▶ Data Knowledge Miner
- ▶ Data Architect
- ▶ Machine Learning Engineer
- ▶ Features Engineer



Average salary:  
**45K€ gross**  
annually

Internship salary:  
**1500-2000€**  
monthly

## Application

### Requirements

- ▶ 4-year bachelor's degree or higher
- ▶ 3-year bachelor's degree with significant experience

### Fees

- ▶ Tuition fees: 18 000 €
- ▶ Application fees: 60 €

### Deadline



31<sup>st</sup> of July (September Intake)  
15<sup>th</sup> of January (March Intake)

### Procedure



**APPLY  
ONLINE**

[www.epita.fr/en](http://www.epita.fr/en)

- 1 Validation of the candidacy
- 2 Online interview
- 3 Online scientific assessment  
(Math, Programming & Algorithms)
- 4 Admission results

Status of an application is communicated by email during each phase of the procedure.

### Checklist

- ▶ Resume
- ▶ Passport
- ▶ Official university transcripts
- ▶ Certified copy of the bachelor's degree certificate
- ▶ 2 letters of recommendation
- ▶ TOEFL 80, TOEIC 800 or IELTS 6.0
- ▶ Motivation letter



**Alexander POPPE**

Class of 2022  
From Belgium

When I studied at EPITA, it was very nice to see people from different countries and also the teachers, who were very close to us. We could always go to them with questions. It was very easy to reach them, and they were always very helpful.



Thanks to EPITA, I am able to find new ways to improve AI models, go through fine-tuning, looking more into the details, looking through every layer, choosing the layers that you actually want to train or not. It is actually what I learned at EPITA, and during my internship that I am capable of deciding, where I want to focus on, how I want to improve these models, if something is state of the art, if it is interesting to implement, how I deploy it on the clouds. What I learnt at EPITA is very interesting.

## Program Outline

	Teaching Unit	Course
S1 Foundation Semester (300 hours)	Introduction to Artificial Intelligence	<ul style="list-style-type: none"> <li>• Introduction to Python</li> <li>• Knowledge Representation &amp; AI History</li> </ul>
	Technical Foundation	<ul style="list-style-type: none"> <li>• Advanced Algorithmic</li> <li>• Relational Databases</li> <li>• Java &amp; UML Programming</li> <li>• Algorithmic Workshop</li> </ul>
	Innovation & Management	<ul style="list-style-type: none"> <li>• Cultural Integration Workshop</li> <li>• General French (All levels)</li> <li>• Communication for Leaders</li> <li>• Managing the Culture Shock</li> </ul>
	Core Data & Artificial Intelligence	<ul style="list-style-type: none"> <li>• Linear Algebra for Data Science</li> <li>• Operations Research I: Linear Programming</li> <li>• Operations Research II: Optimization for Data Science</li> <li>• Numerical Algorithms</li> <li>• Probability &amp; Statistics for Machine Learning</li> </ul>
S2 Core Semester (300 hours)	Data Science	<ul style="list-style-type: none"> <li>• Python Week</li> <li>• Intermediate Python for Data Science</li> <li>• Machine Learning I: Introduction to Statistical ML</li> <li>• Machine Learning II: Bayesian &amp; Unsupervised Methods</li> <li>• Neural Networks &amp; Deep Learning</li> </ul>
	Technical Foundation	<ul style="list-style-type: none"> <li>• Data Privacy by Design</li> <li>• Cloud Computing using AWS</li> </ul>
	Data Engineering	<ul style="list-style-type: none"> <li>• NOSQL Databases</li> <li>• Spark &amp; Python for Big Data</li> <li>• Data Exploration &amp; Preparation</li> <li>• Data Reporting &amp; Visualization</li> <li>• Data Science in Production 1</li> </ul>
	Operational Methodologies	<ul style="list-style-type: none"> <li>• General French (All levels)</li> <li>• AI Project Methodology</li> </ul>
S3 Excellence Semester (300 hours)	Management & Soft Skills	<ul style="list-style-type: none"> <li>• Career Project Elaboration</li> </ul>
	Advanced Management & Engineering Science	<ul style="list-style-type: none"> <li>• Cross-Border Management</li> <li>• Digital Transformation</li> <li>• Introduction to Block Chain &amp; Bitcoin</li> <li>• General French (All levels)</li> </ul>
	Applied Data Science & Artificial Intelligence	<ul style="list-style-type: none"> <li>• Recommender System</li> <li>• Natural Language Processing</li> <li>• AI in Signal &amp; Audio Processing</li> <li>• AI in Image and Video Processing</li> <li>• Time-Series Analysis</li> <li>• Machine Learning I: Introduction to Statistical ML 2</li> <li>• Action Learning</li> </ul>
S4	Data Engineering	<ul style="list-style-type: none"> <li>• Reinforcement Learning</li> <li>• Ethical Development of AI Applications</li> <li>• Big Data Infrastructure &amp; Cloud Computing</li> <li>• Data Science in Production 2</li> </ul>
	Internship	<ul style="list-style-type: none"> <li>• 6-month internship in a company</li> </ul>