

INTERNATIONAL BACHELOR OF SCIENCE IN ARTIFICIAL INTELLIGENCE

U N I V E R S I T É P S L

You wish to understand and shape tomorrow's world with artificial intelligence?

Join the International Bachelor of Sciences in Artificial Intelligence (IBSAI) of Université PSL in Paris.

This leading program in AI education, offered as part of the Paris School of AI, brings together some of the best European academics in AI. As a global and collegiate university, PSL is a European and international leader in artificial intelligence and data science. Taught entirely in English, this new bachelor program benefits from the combined expertise of PSL member schools. This program thus benefits from a unique scientific ecosystem that combines cutting-edge research, disruptive entrepreneurship and international perspectives.

As a unique opportunity to further study in the most selective graduate programs, in France and worldwide, this bachelor will allow you to master all the essential knowledge in mathematics and computer science for AI.

MAIN ASSETS

- **A unique and highly selective 3-year program at the heart of Paris** designed for students passionate about mathematics, computer science and emerging technologies.
- **Cutting-edge scientific education** offering cross-disciplinary courses in economics, law, climate and societal issues connected to AI.
- **Interdisciplinary projects & immersion in the research and innovation ecosystems:** team projects, summer schools, lecture series by international experts, internships.
- **Personal development and professionalization:** training entirely in English, intercultural awareness, communication skills etc.

LEARNING OUTCOMES

- Training experts in the mathematical and computer science foundations of artificial intelligence.
- Developing an in-depth understanding of algorithms, machine learning and its fields of application.
- Preparing students to tackle the technological and societal challenges associated with AI through an interdisciplinary approach and international exposure.
- Training as closely as possible through the most recent research.

OPPORTUNITIES

These 3 years of training will allow students to develop knowledge and skills sought after by top universities as well as employers.

→ Graduate opportunities

At the end of the program, students will pursue their studies within Université PSL (selective disciplinary or multidisciplinary master's degrees, engineering schools) or beyond in the best selective universities, in France and worldwide.

A few examples:

- Master's degree in Artificial Intelligence, Systems, Data
- Master's degree AI & society
- Engineering degree at MINES Paris – PSL, ESPCI Paris – PSL or Chimie Paris – PSL.

→ Career opportunities

Depending on the specialization chosen in their graduate studies, students can aspire to various careers in the world of research, the technology industry (AI developer, machine learning engineer, data scientist) or entrepreneurship in innovative fields connected to AI.

CURRICULUM

Bachelor's Year 1 | Semester 1

Transverse Courses

- Languages
- A Healthy Mind in a Healthy Body
- Principles of Economics 1

AI-focused Courses

- Introduction to AI

Fundations of AI

- Math in Practice: Calculus
- Math in Practice: Mathematical Reasoning & Writing
- Algebra 1
- Analysis 2
- The Art of Computer Programming
- Climate fresk
- Introduction to Statistics

Bachelor's Year 1 | Semester 2

Transverse Courses

- Principles of Economics 2
- Law and Tech
- Meet the AI Innovators
- Languages

AI-focused Courses

- Machine Learning
- ML Project

Fundations of AI

- Analysis 2
- Algebra 2
- Introduction to Probability
- Database Management
- The Art of Computer Programming

STRUCTURE OF THE PROGRAM

Joining IBSAI means joining a unique environment, at the heart of the advances that are shaping the future of artificial intelligence. All classes are taught in English.

The program takes place over 3 years (B1, B2, B3):

— **Year 1:** Mastering of the scientific foundations in mathematics, algorithms, programming, and introduction to intelligent systems. Cross-disciplinary training in economics and law.

— **Year 2:** Deepening of concepts in mathematics, algorithms and programming, management of large data bases, and machine learning.

— **Year 3:** Specialization with advanced classes in artificial intelligence, automatic language processing, computer vision, robotics and cognitive sciences; a laboratory or company internship, and completion of a final year project, specialization course in advanced mathematics or advanced computer science; practical workshops on industrial cases ("AI clinic").

PSL STUDENT SERVICES

Welcome desk, Accommodation, Healthcare, Language center, Sport etc: several services are available on PSL campus to help you make the best of your student experience.

TEACHING LOCATION

Courses take place in the heart of Paris (5th district).

More information

psl.eu/en/education/international-bachelor-science-ai

Contact

bachelor_science_ai@psl.eu

ADMISSIONS

Prerequisites (Year 1): A general "Baccalaureate" (high school diploma) from the French secondary education system, obtained in France or abroad, or a foreign diploma with recognized equivalence, with strong academic results across all subjects and completion of advanced mathematics courses.

→ **Specialities:** Mathematics with the "Expert Mathematics" option + Any other speciality.

→ **Language:** Proficiency in English at level C1.

Application procedure: Based on an application through Parcoursup (according to the national calendar).

Application analysis criteria

→ **Academic results:** Excellent level in mathematics and English. Progression of results in recent years.

→ **Skills and know-how:** Ability to analyze, model and solve complex problems. Autonomy, organization and work methods.

→ **Personal skills and motivation:** Curiosity about artificial intelligence and interdisciplinary sciences. Adequacy between the project expressed and the training objectives. Quality of written and spoken English.

DIPLOMA DELIVERED

Bachelor's degree delivered by Université PSL (180 ECTS).