



**ESSEC**  
BUSINESS SCHOOL



# AI FOR BUSINESS

PROGRAM	WHEN	WHERE	WHO	LANGUAGE OF INSTRUCTION	ECTS/US CREDITS	APPLICATION DEADLINE	FEES
AI for Business	23 <sup>rd</sup> June – 4 <sup>th</sup> July 2025	Paris Cergy	University students	 English	8 ECTS/ 4 US Credits	15/04/2025	4 300€ including housing

## COURSE OUTLINE

The "AI For Business" program is a short, intensive course designed for Bachelor and Master students to explore the transformative potential of Artificial Intelligence (AI) in business. This two-week program combines foundational AI education, hands-on project development, thematic explorations, and industry engagement to equip participants with the skills and knowledge necessary to integrate AI into real-world business contexts.

NB: Bachelor or Master students who apply to this program should be keen on learning how to build AI applications with business value. During the courses, students will acquire problem solving, computer science and mathematical skills.

***This program recommends applicants to have an interest in computer science and maths.***

## LEARNING GOALS

- Understand the fundamentals of Artificial Intelligence and its applications in business.
- Gain proficiency in Python programming and essential data analysis techniques.
- Explore various machine learning models, including supervised and unsupervised learning.
- Develop practical experience by working on an AI project from inception to delivery.
- Analyze the intersection of AI with specific business domains, including marketing, finance, sustainability, and creativity.
- Enhance problem-solving, critical thinking, and collaboration skills through project-based learning.

## COURSE DESCRIPTION

The program spans over two weeks, with each week focusing on its own pedagogical goals. Week 1 is dedicated to learning the foundations of AI and kicking off the capstone project. Week 2 will focus more on the business impact of AI and how GenAI is reshaping management practices.

- The courses will cover an overview of AI concepts and their impact on business transformation.
- Case studies of successful AI implementations.
- Basics of Python programming and navigation of Jupyter Notebooks.
- Techniques for handling and visualizing data effectively.
- Concepts and applications of regression models in business.
- Techniques for building and applying classification models.
- Methods for dimensionality reduction and clustering.
- Basics of text analysis and NLP applications.
- Understanding neural networks and role in AI.
- Methods for analyzing temporal data and forecasting trends.

## AI PROJECT KICK-OFF & DEVELOPMENT

- Teams formation and identify a business challenge to address with AI.
- Initial brainstorming and problem definition.
- Teams refine their solutions with expert feedback and guidance.

## THEMATIC SESSIONS

These sessions will start by covering predictive AI's impact on businesses, followed by exploring how GenAI is transforming current practices in Marketing, Strategy, Entrepreneurship, and Management. They also include half a day for a guided practical exercise where students will experience creating their own venture in 2 hours using GenAI tools.