

Higher Education

AI for Finance: How to Leverage AI in the Financial Industry



ESSEC
BUSINESS SCHOOL



HOUSE OF
TRAINING
The Future is Made of Skills

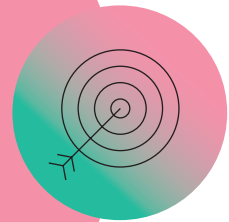
About the Programme

House of Training, in partnership with ESSEC Business School and co-developed by ABBL, offers an intensive programme designed specifically for financial professionals in Luxembourg who want to harness the power of artificial intelligence in the finance sector.

Participants will leverage the expertise of ESSEC's Finance Department, home to one of the world's top-ranked Master in Finance programs, and the ESSEC Metalab for AI, Data & Society, which is dedicated to responsible AI adoption.

Objectives

- Understand the core principles of artificial intelligence and machine learning and how they apply to financial activities.
- Identify concrete opportunities and risks of AI for financial institutions, including regulatory and operational implications.
- Apply practical AI-driven solutions to support strategic and data-informed decisionmaking.
- Develop a pragmatic, non-technical understanding of AI, enabling them to evaluate and integrate AI initiatives without any coding background.
- Connect with a network of experts and practitioners involved in AI and financial innovation decision-making.



Who Should Attend

The course can be followed by various target groups:

- Financial professionals without a technical background, aiming to understand AI from a strategic perspective and learn how to integrate it effectively within their organizations.
- IT specialists in financial institutions seeking a strategic understanding of AI.
- Finance managers, investment analysts, risk officers, compliance officers, innovation managers, and data or IT project leads within banks, asset management firms, insurance companies, or fintechs.

Why Choose This Programme?

Strong academic and industry partnership

This programme combines academic depth with direct relevance for Luxembourg's financial sector.

No coding background required

The course focuses on a pragmatic, non-technical understanding of AI, making it accessible to financial professionals who want to assess and lead AI initiatives without being technical experts.

Immediate business relevance

Participants learn how to identify concrete AI opportunities and risks, including operational, strategic and regulatory implications for financial institutions.

Expert-led learning

Sessions are delivered by ESSEC faculty involved in cutting-edge AI research and complemented by guest speakers currently implementing AI solutions in leading financial institutions.

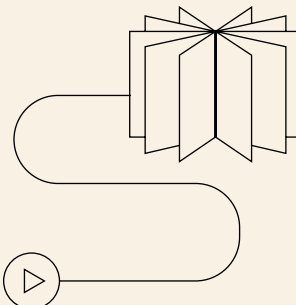
At a Glance

- **Next intake:** 8 June 2026
- **Duration:** 28 contact hours
- **Format:** Daytime classes
- **Delivery Mode:** In-person, Luxembourg (House of Training, Kirchberg)
- **Language:** English
- **Tuition Fees:** €4,300



Exam: Ongoing assessments during the course, plus a final test.

Certificate: Upon completion of the programme, participants will receive a certificate jointly issued by ESSEC Business School, ABBL and House of Training.



4-day programme, half-day for each module

Module 1

AI Foundations and Conditional Probabilities

Understand core concepts of deep learning and neural networks. Develop intuition on what LLMs can concretely achieve by exploring conditional probabilities and the latent representation of text.

Module 2

Understanding LLMs' Performance

Learn how to apply textual analysis in finance, assess performance, and generate insights through prompt engineering, Chain-of-Thought, and long reasoning.

Module 3

AI for Investment Decisions

Analyze how AI can support investment decisions and understand its limitations, drawing on academic research. Examine the role of AI for identifying opportunities and portfolio optimization.

Module 4

AI for Financial Institutions

Explore how major financial institutions leverage AI to streamline operations, mitigate risk, enhance compliance, and maximize AML efforts.

Module 5

The EU AI Act

Understand the concrete implications of the EU AI Act on the financial sector, emphasizing compliance and addressing associated challenges.

Module 6

AI Implementation

Elaborate a realistic AI implementation plan and discuss the main challenges and potential obstacles.

Module 7

Main Commercial AI Systems and Tools

Gain a clear understanding of leading commercial AI platforms, their costs, fine-tuning capabilities, and insights into their business models.

Module 8

Future Directions and Capstone Projects

Explore emerging AI trends and engage in a capstone project designed to apply and consolidate your learning in real-world scenarios.

Lecturers



Luciano Somoza

Luciano Somoza is an Assistant Professor of Finance at ESSEC. He holds a PhD from the Swiss Finance Institute with visiting periods at LSE and NYU. His work focuses on digital money and AI, and he frequently contributes to the public debate (e.g., Financial Times, Le Monde, Il Sole 24 Ore, etc.).



Elise Gourier

Elise Gourier is an Associate Professor of Finance at ESSEC, following a Postdoc at Princeton. She is affiliated with the CEPR and is Co-head of the ESSEC-Amundi Chair. She has collaborated on AI projects with several major investment funds.



Bamdad Shams

Bamdad Shams is a Professor of Management Practice at ESSEC, where he heads the Law Track. He holds a PhD in Law from Sciences Po Paris, where he was also a lecturer, and is a practicing lawyer at the Paris Bar. His work focuses on international business law and the legal challenges of AI and data protection.



Niccolo Gentile

Niccolo Gentile is an AI scholar with a PhD from the University of Luxembourg. He is specialized in AI implementation for major Luxembourgish financial institutions, most notably LLM-based solutions and research. He also collaborates regularly with AI startups.



Coralie Jaunin

Coralie Jaunin is a Quantitative Analyst at UBS in Zurich, who will discuss AI implementation for compliance and financial crime prevention. She earned her PhD from HEC Lausanne, including a visiting period at the Wharton School of the University of Pennsylvania.



Francesco Capuano

Francesco Capuano is a PhD researcher at the University of Oxford working on Reinforcement Learning and robotics. He has experience as an AI engineer and researcher at Mistral AI, Hugging Face, and Bain & Company.

About Us

ESSEC BUSINESS SCHOOL

Founded in 1907, ESSEC Business School is a leading academic institution that combines academic rigor and practical expertise to educate the responsible leaders of tomorrow. Upholding a legacy of excellence, it nurtures a spirit of openness to advance business and social initiatives as well as innovation.

With programs ranked among the best in the world, thanks in particular to its outstanding faculty, ESSEC Business School is a dynamic and committed school, recognized for its ability to educate and transform the leaders of tomorrow.



171

professors from
37 different nationalities,
and 26 Emeritus
professors



5 000

managers and executives
trained every year
in Executive Education



23

research and teaching
chairs, backed by over
1,000 companies



79 000

ESSEC Alumni
members around
the world



HOUSE OF TRAINING

Created in 2015 by the Chamber of Commerce and the Luxembourg Bankers' Association (ABBL), House of Training is an accredited continuing vocational training organisation, active in many areas and sectors of activity.



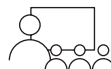
1 450+

trainings



60

partners



800+

Expert Trainers



13

academic
programmes



The ABBL (Luxembourg Banking Association) is the largest professional association in the financial sector, representing the majority of financial institutions as well as regulated financial intermediaries and other professionals in Luxembourg, including law firms, consultancies, auditors, market infrastructures, e-money and payment institutions.

This broad representation makes the ABBL a true reflection of the diversity of the Luxembourg financial centre and places it in a unique position to act as the collective voice of the sector at both national and international levels. The association provides its members with the intelligence, resources, and services necessary to operate effectively in a dynamic financial market and within an increasingly complex regulatory environment.

Make your skills & career go Higher



Higher Education means:

- ✓ **14 university-level programs** which fit around your job
- ✓ **5 prestigious partners**
- ✓ **3 levels of degree:**

Certificate

Master

MBA

houseoftraining.lu



HOUSE OF
TRAINING

The Future is Made of Skills

Apply & Contact

How to apply

Registration for the programme is to be made online via our website.



Contact :

Sophie Prevot, Senior Training Advisor Higher Education
highereducation@houseoftraining.lu
(+352) 46 50 16 - 460



HOUSE OF
TRAINING

houseoftraining.lu

highereducation@houseoftraining.lu



BP 490 L-2014 Luxembourg

T (+352) 46 50 16 - 1
