



ID

VP142\_ESOMAS

## **Visiting Professor Program Academic Year 2024/2025**

**TEACHING COMMITMENT:** 16 hours

**COURSE TITLE**

**Machine Learning for Finance Applications**

**TEACHING PERIOD**

1st term

**SCIENTIFIC AREA**

Quantitative Finance

**LANGUAGE USED TO TEACH**

English

**COURSE SUMMARY**

The course introduces some fundamental concepts from machine learning, with a focus towards important financial applications.

In particular, the lectures will offer an Introduction to Machine Learning and an overview of the concepts used for financial applications. These applications could include: deep hedging; randomized neural network for pricing derivatives; and deep calibration.

**LEARNING OBJECTIVES**

The course intends to provide students with the main concepts related with the use of machine learning in finance. This up-to-date methodologies are immediately useful both in the financial industry and in more advanced courses (e.g., PhD level).

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### **VISITING PROFESSOR PROFILE**

The Visiting Professor must be an expert in financial derivatives and related mathematical and statistical methods, including machine learning, as recognized through research activities, publications in international academic journals, and teaching activities.

### **CONTACT REFERENT**

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