# **COURSE DETAIL**

### **COMPUTATIONAL METHODS IN FINANCIAL MATHEMATICS**

**Country** United Kingdom - England

Host Institution London School of Economics

**Program(s)** Summer at London School of Economics

UCEAP Course Level Upper Division

UCEAP Subject Area(s) Mathematics

**UCEAP Course Number** 104

**UCEAP Course Suffix** 

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UCEAP Official Title COMPUTATIONAL METHODS IN FINANCIAL MATHEMATICS

UCEAP Transcript Title COMPUTATN/FIN MATH

**UCEAP Quarter Units** 5.50

**UCEAP Semester Units** 

## **Course Description**

In this hands-on course, students are introduced to the models and theory necessary to develop computational skills in the field of financial mathematics. Covering topics such as the Monte Carlo method, stochastic models, the binomial tree model, the theory of risk-neutral pricing, derivative pricing and the interpretation of random variables, students learn how computational methods can be used to evaluate different financial scenarios. During supervised programming sessions, which include an introduction to programming in Python, students have the opportunity to implement the computational methods introduced to students using relevant examples.

### Language(s) of Instruction English

Host Institution Course Number ME200

Host Institution Course Title COMPUTATIONAL METHODS IN FINANCIAL MATHEMATICS

## Host Institution Campus

London School of Economics

**Host Institution Faculty** 

#### **Host Institution Degree**

**Host Institution Department** Research Methods, Data Science, and Mathematics

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