

# COURSE DETAIL

## QUANTITATIVE FINANCE: MATHEMATICS IN INVESTMENT BANKING

**Country**

United Kingdom - England

**Host Institution**

University College London

**Program(s)**

Summer at University College London

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Mathematics

**UCEAP Course Number**

142

**UCEAP Course Suffix**

S

**UCEAP Official Title**

QUANTITATIVE FINANCE: MATHEMATICS IN INVESTMENT BANKING

**UCEAP Transcript Title**

INVESTMENT BANKING

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

### **Course Description**

Quantitative finance remains one of the fastest growing areas in modern finance. Alternative names are financial engineering, mathematical finance, or financial mathematics. This is an application-based course on the mathematical and computational aspects of derivative pricing. It lies at the heart of mathematics, computing, finance, and economics. Both theory and numerical techniques are presented, with computer simulations performed on MS Excel. If you are interested in technical finance and have wondered what Brownian Motion is, or how Monte Carlo methods are used to price options; then this module is precisely what you are looking for – covering Itô Calculus, Black-Scholes world and Monte Carlo simulations. This is not a theorem-proof based course, but all results are derived.

### **Language(s) of Instruction**

English

### **Host Institution Course Number**

ISSU0062

### **Host Institution Course Title**

QUANTITATIVE FINANCE: MATHEMATICS IN INVESTMENT BANKING

### **Host Institution Course Details**

<https://www.ucl.ac.uk/prospective-students/summer-school/modules/quantitative-f...>

### **Host Institution Campus**

### **Host Institution Faculty**

### **Host Institution Degree**

**Host Institution Department**

Mathematics

**Course Last Reviewed**

2025-2026

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