COURSE DETAIL

STOCHASTIC METHODS IN FINANCE II
Country United Kingdom - England
Host Institution University College London
Program(s) University College London
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Statistics
UCEAP Course Number 115
UCEAP Course Suffix
UCEAP Official Title STOCHASTIC METHODS IN FINANCE II
UCEAP Transcript Title STOCHASTIC METHODS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
This course aims to explore advanced topics in finance via mathematical and statistical methods in order to gain a better understanding of optimal decision making, risk management and derivative pricing techniques. It is primarily intended for third and fourth year undergraduate students and taught postgraduate students registered on the degree programs offered by the Department of Statistical Science, or jointly with other departments. The academic prerequisite for such students is STAT0013. On successful completion of the course, a student should be able to: define the concepts of risk aversion and stochastic dominance, and apply them to manage risk in, and rank capital projects; understand how dynamic programming can be used to make optimal decisions under uncertainty; understand how to apply mathematical and statistical modelling techniques to credit risk modelling, value-at-risk measurements and capital adequacy assessments; understand a range of modelling techniques used in derivative pricing, and the concepts and assumptions that underpin them; criticize and understand the limitations of these techniques as they are used in the modern finance industry.

Language(s) of Instruction
English

Host Institution Course Number
STAT0018

Host Institution Course Title
STOCHASTIC METHODS IN FINANCE II

Host Institution Campus
University College London

Host Institution Faculty

Host Institution Degree

Host Institution Department
Statistical Science

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