Course

Computational Methods for Finance

MATH5335 | **6 Units of Credit**

Overview

In the end finance is concerned with making definite numerical recommendations that frequently can only be obtained by analysing sophisticated models using high-speed computers. This course studies the design, implementation and use of computer programs to solve practical mathematical problems of relevance to finance, insurance and risk management.
It includes a review of MATLAB, floating point numbers, rounding error and computational complexity, and a selection of topics from: approximation and parameter estimation, Fourier series and the FFT, finite difference approximations, partial differential equations (Black-Scholes PDE), sparse linear systems, nonlinear algebraic equations, trees, Monte Carlo methods and simulation, random numbers and variance reduction, numerical integration.

Faculty
Faculty of Science

School
School of Mathematics & Statistics

Study Level
Postgraduate

Offering Terms
Term 2

Campus
Kensington

Delivery Mode
Fully on-site

Indicative contact hours
4

Timetable
Visit timetable website for details

Exclusion Courses

MATH3311 | 6 UOC

Mathematical Computing for Finance

Course Outline

To access course outline, please visit:

MATH5335 Course Outline

Fees

Commonwealth Supported Students $1191
Domestic Students $3900
International Students $5580

DISCLAIMER
Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the fee website.

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.

Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions

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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179