

Programme Regulations

Academic year programme, lasting 10 months.

Students must take five compulsory courses worth 2.5 units, and optional courses to the value of 1.5 units. There is also a two-week **compulsory** pre-sessional course, *MA400: September Introductory Course*, relating to MA415 and MA417.

Paper 1 – MA415: Mathematics of the Black and Scholes Theory (0.5)

Paper 2 – MA416: The Foundations of Interest Rate and Credit Risk Theory (0.5)

Paper 3 – ST409: Stochastic Processes (0.5)

Paper 4 – FM413: Fixed Income Markets (0.5)

Paper 5 – MA417: Computational Methods in Finance (0.5)

Paper 6 – 0.5 units from:

- MA402: Game Theory I (0.5)
- MA411: Probability and Measure (0.5)
- MA414: Stochastic Analysis (0.5)
- MA420: Quantifying Risk and Modelling Alternative Markets (0.5)
- ST439: Stochastics for Derivatives Modelling (0.5)
- ST440: Recent Developments in Finance and Insurance (0.5)

Papers 7/8 – 1.0 units from:

- FM402: Financial Risk Analysis (0.5)
- FM404: Forecasting Financial Time Series (0.5)
- FM441: Derivatives (0.5)
- FM442: Quantitative Methods for Finance and Risk Analysis (0.5)
- FM445: Portfolio Management (0.5)
- FM472: International Finance (0.5)
- FM492: Principles of Finance (1.0)
- ST422: Time Series (0.5)
- ST426 : Applied Stochastic Processes (0.5)
- ST427: Insurance Mathematics (0.5)
- ST429: Probabilistic Methods in Risk Management and Insurance (0.5)
- Further half unit(s) from courses listed under paper 6 above

Students can also take *MA422: Research Topics in Financial Mathematics* as an additional non-assessed course.