

# Provisional Programme Regulations

2019/20 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**. In addition students must take **MA432 Programming in C++** a **compulsory** non-assessed module in MT.

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)
- MA418: Preferences, Optimal Portfolio Choice, and Equilibrium (not available 2019/20)
- MA420: Quantifying Risk and Modelling Alternative Markets (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)
- FM429: Asset Markets A (0.5)
- FM430: Corporate Finance & Asset Markets (1.0)
- FM441: Derivatives (0.5)
- FM442: Quantitative Methods for Finance and Risk Analysis (0.5)
- FM445: Portfolio Management (0.5)
- FM472: International Finance (0.5)
- ST422: Time Series (0.5)
- ST426 : Applied Stochastic Processes (0.5)
- ST429: Statistical Methods for Risk Management (0.5)
- ST448: Insurance Risk (0.5)
- Further half unit(s) from courses listed under paper 6 above

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