B.Sc. & B.Sc. (Hons) with Major in Applied Mathematics (without specialization, but with interest in Financial Mathematics)

Sample Study Plan for Students Admitted in AY2016/17

Occasionally certain modules listed below may not be offered in a particular year.

LEVEL	RECOMMENDED MODULES
1000	- MA1100 Fundamental Concepts of Mathematics - MA1101R Linear Algebra I - MA1102R Calculus - MA1104/MA2104 Multivariable Calculus - CS1010/CS1010E/CS1010S/CS1010FC/CS1010X Programming Methodology
2000	- MA2101/MA2101S Linear Algebra II - MA2108/MA2108S Mathematical Analysis I - MA2213 Numerical Analysis I - MA2216/ST2131 Probability - ST2132 Mathematical Statistics or MA3238/ST3236 Stochastic Process I
3000	- MA3110/MA3110S Mathematical Analysis II - MA3111/MA3111S Complex Analysis I - MA3269 Mathematical Finance I - Two of the following modules: - MA3220 Ordinary Differential Equations[2,3] - MA3227 Numerical Analysis II - MA3236 Nonlinear Programming - MA3252 Linear and Network Optimization[1,4] - Optional unrestrictive elective module: - QF3101 Investment Instruments: Theory and Computation *Note:* *One may need to take additional Level 3000 modules as unrestrictive elective modules to serve as prerequisites for certain Level 4000 modules*

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LEVEL	RECOMMENDED MODULES
4000	• MA4199 Honours Project in Mathematics • MA4230 Matrix Computation • MA4269 Mathematical Finance II • MA4254 Discrete Optimization[1] • MA4255 Numerical Methods in Differential Equations[2] • One of the following modules: – MA4221 Partial Differential Equations[3] – MA4264 Game Theory[4] – MA4268 Mathematics for Visual Data Processing

[1] MA4254 requires MA3252 as prerequisite
[2] MA4255 requires MA3220 as prerequisite
[3] MA4221 requires MA3220 as prerequisite
[4] MA4264 requires MA3236 or MA3252 as prerequisite

Updated 30 June 2017