

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 AY2014/15 or AY2015/16

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

LEVEL	RECOMMENDED MODULES
1000	<ul style="list-style-type: none"> • MA1100 Fundamental Concepts of Mathematics • MA1101R Linear Algebra I • MA1102R Calculus • MA1104 Multivariable Calculus • CS1010/CS1010E/CS1010S/CS1010FC/CS1010X Programming Methodology
2000	<ul style="list-style-type: none"> • MA2101/MA2101S Linear Algebra II • MA2108/MA2108S Mathematical Analysis I • MA2213 Numerical Analysis I • MA2216/ST2131 Probability • ST2132 Mathematical Statistics
3000	<ul style="list-style-type: none"> • MA3110/MA3110S Mathematical Analysis II • MA3111/MA3111S Complex Analysis I • MA3238/ST3236 Stochastic Process I • MA3269 Mathematical Finance I • Two of the following modules: <ul style="list-style-type: none"> – MA3220 Ordinary Differential Equations – MA3227 Numerical Analysis II – MA3236 Nonlinear Programming – MA3252 Linear and Network Optimization • Optional unrestrictive elective module: <ul style="list-style-type: none"> – QF3101 Investment Instruments: Theory and Computation <p><i>Note:</i> One may need to take additional Level 3000 modules as unrestrictive elective modules to serve as prerequisites for certain Level 4000 modules</p>

LEVEL	RECOMMENDED MODULES
4000	<ul style="list-style-type: none">• MA4199 Honours Project in Mathematics• MA4230 Matrix Computation• MA4269 Mathematical Finance II• MA4254 Discrete Optimization¹• MA4255 Numerical Methods in Differential Equations²• Two of the following modules:<ul style="list-style-type: none">– MA4221 Partial Differential Equations³– MA4264 Game Theory⁴– 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 19 Nov 2016