

B.Sc. & B.Sc. (Hons) with Major in Applied Mathematics with Specialization in Operations Research and Financial Mathematics (ORFM)

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	<ul style="list-style-type: none"> • MA1100 Fundamental Concepts of Mathematics • MA1101R Linear Algebra I • MA1102R Calculus • MA1104/MA2104 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 • One of the following modules: <ul style="list-style-type: none"> – MA2214 Combinatorics and Graphs I – ST2132 Mathematical Statistics – ST3131 Regression Analysis²
3000	<ul style="list-style-type: none"> • MA3110/MA3110S Mathematical Analysis II • MA3111/MA3111S Complex Analysis I • MA3236 Nonlinear Programming • MA3252 Linear and Network Optimization • MA3269 Mathematical Finance I • 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• MA4254 Discrete Optimization• MA4260 Stochastic Operations Research• MA4264 Game Theory• MA4269 Mathematical Finance II• One of the following modules:<ul style="list-style-type: none">– MA4230 Matrix Computation– MA4255 Numerical Methods in Differential Equations¹– ST4245 Statistical Methods for Finance²

¹ MA4255 requires MA3220 as prerequisite

² ST4245 requires ST3131 as prerequisite

Updated 30 June 2017