

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 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 • One of the following modules: <ul style="list-style-type: none"> – MA2202/MA2202S Algebra I or MA3218 Applied Algebra – MA2214 Combinatorics and Graphs I – ST2132 Mathematical Statistics
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 • ST3131 Regression Analysis <p><u>Note:</u> <i>One may need to take additional Level 3000 modules as unrestrictive elective modules to serve as prerequisites for certain Level 4000 modules</i></p>

LEVEL	RECOMMENDED MODULES
4000	<ul style="list-style-type: none">• MA4199 Honours Project in Mathematics• MA4254 Discrete Optimization• MA4264 Game Theory• MA4269 Mathematical Finance II• ST4245 Statistical Methods for Finance• Two of the following modules:<ul style="list-style-type: none">– MA4230 Matrix Computation– MA4235 Topics in Graph Theory¹– MA4255 Numerical Methods in Differential Equations²– MA4260 Stochastic Operations Research

¹ MA4235 requires MA3233 as prerequisite (MA3233 requires MA2214 as prerequisite)

² MA4255 requires MA3220 as prerequisite

Updated 19 Nov 2016