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

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	• MA1100 Fundamental Concepts of Mathematics • MA1101R Linear Algebra I • MA1102R Calculus • MA1104 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
	• One of the following modules:
	  – MA2202/MA2202S Algebra I or MA3218 Applied Algebra
	  – MA2214 Combinatorics and Graphs I
	  – ST2132 Mathematical Statistics

3000	• MA3110/MA3110S Mathematical Analysis II
	• MA3111/MA3111S Complex Analysis I
	• MA3233 Combinatorics and Graphs II[1]
	• MA3236 Nonlinear Programming
	• MA3252 Linear and Network Optimization
	• One of the following modules:
	  – MA3220 Ordinary Differential Equations
	  – MA3227 Numerical Analysis II
	  – MA3238/ST3236 Stochastic Processes I
	  – MA3264 Mathematical Modelling
	
	Note:
	One may need to take additional Level 3000 modules as unrestrictive elective modules to serve as prerequisites for certain Level 4000 modules

LEVEL	RECOMMENDED MODULES
4000	- MA4199 Honours Project in Mathematics - MA4230 Matrix Computation - MA4235 Topics in Graph Theory - MA4254 Discrete Optimization - MA4264 Game Theory - Two of the following modules: – MA4221 Partial Differential Equations[2] – MA4255 Numerical Methods in Differential Equations[3] – MA4268 Mathematics for Visual Data Processing

[1] MA3233 requires MA2214 as prerequisite
[2] MA4221 requires MA3220 as prerequisite
[3] MA4255 requires MA3220 as prerequisite

Updated 19 Nov 2016