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

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 - 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 - MA3220 Ordinary Differential Equations - MA3227 Numerical Analysis II - One of the following modules: - MA3209 Mathematical Analysis III[1] - MA3236 Nonlinear Programming[3] - MA3252 Linear and Network Optimization[2,3] - 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 - MA4221 Partial Differential Equations - MA4230 Matrix Computation - MA4255 Numerical Methods in Differential Equations - Two of the following modules: - MA4211 Functional Analysis[1] - MA4254 Discrete Optimization[2] - MA4264 Game Theory[3] - MA4268 Mathematics for Visual Data Processing - MA4270 Data Modelling and Computation

[1] MA4211 requires MA3209 as prerequisite
[2] MA4254 requires MA3252 as prerequisite
[3] MA4264 requires MA3236 or MA3252 as prerequisite

Updated 30 June 2017