

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 AY2017/18 ~~or after~~ and AY2018/19

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 CS1010/CS1010E/CS1010S/CS1010FC/CS1010X Programming Methodology
2000	<ul style="list-style-type: none"> MA2101/MA2101S Linear Algebra II MA2104 Multivariable Calculus MA2108/MA2108S Mathematical Analysis I MA2213 Numerical Analysis I MA2216/ST2131 Probability MA2214 Combinatorics and Graphs I ¹
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 One* of the following modules: <ul style="list-style-type: none"> MA3220 Ordinary Differential Equations ² MA3227 Numerical Analysis II MA3233 Combinatorics and Graphs II ¹ MA3264 Mathematical Modelling <p>*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• MA4254 Discrete Optimization• MA4260 Stochastic Operations Research• MA4264 Game Theory• One of the following modules:<ul style="list-style-type: none">– MA4235 Topics in Graph Theory ¹– MA4255 Numerical Methods in Differential Equations ²– MA4268 Mathematics for Visual Data Processing– MA4270 Data Modelling and Computation <p><u>Notes:</u> ¹ MA4235 requires MA3233 as prerequisite (and MA3233 requires MA2214 as prerequisite). ² MA4255 requires MA3220 as prerequisite</p>

Updated 30 June 2017

Updated 1 July 2019