B.Sc. & B.Sc. (Hons) with Major in Applied Mathematics with Specialization in Mathematical Modelling and Data Analytics (MMDA)

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	• MA1100 Fundamental Concepts of Mathematics • MA1101R Linear Algebra I • MA1102R Calculus • CS1010/CS1010E/CS1010S/CS1010FC/CS1010X Programming Methodology

2000	• MA2101/MA2101S Linear Algebra II
	• MA2104 Multivariable Calculus
	• 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 [1]
	  – ST2132 Mathematical Statistics

3000	• MA3110/MA3110S Mathematical Analysis II
	• MA3111/MA3111S Complex Analysis I
	• MA3220 Ordinary Differential Equations
	• Two* of the following modules:
	  – MA3227 Numerical Analysis II
	  – MA3264 Mathematical Modelling
	  – ST3131 Regression Analysis [2]
	
	*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 - MA4255 Numerical Methods in Differential Equations - MA4268 Mathematics for Visual Data Processing - MA4270 Data Modelling and Computation - One of the following modules: - MA4229 Approximation Theory/Fourier Analysis and Approximation - MA4261 Coding and Cryptography [1] ~~MA4272 Mathematical Tools for Data Science~~ - DSA4211 High-Dimensional Statistical Analysis [2] Notes: [1] MA4261 requires MA3218 as prerequisite [2] DSA4211 requires ST3131 as prerequisite

Updated 30 June 2017
Updated 1 July 2019