

Bachelor of Science

MAJOR Mathematics

This study plan should be used as a general guide for your course. We recommend you consult with your <u>CSE</u> <u>Course/Major Advisor</u> and particularly if your intended enrolment varies from this plan.

The information in the study plan is current at the time of creation and may be subject to future change. If you would prefer a part-time study plan, please adjust the below study planner; reviewing subject prerequisites to ensure you are on track for course completion.

Useful study planning/enrolment resources:

To search for information on subjects: <u>Subject Search</u> To register for your classes: <u>Class Registration</u> For important dates check: <u>Academic Calendars</u> Further enrolment resources: <u>Enrolment Resources</u>

	STUDY PERIOD 1	STUDY PERIOD 2
Year 1	Course SC1101 :03 Science Technology and Truth	Course SC1102:03 Modelling Natural Systems PREREQ: MA1020 or MA0020 or Senior Mathematics or equivalent or SC1109:03 Modelling Natural Systems-Advanced ^ PREREQ: MA1000 or MA1009
	Course MA1020:03 Preparatory Mathematics – SP3 or Elective (only if already satisfied via previous study)**	Course CH1020:03 Preparatory Chemistry or Elective (only if already satisfied via previous study)
	Major MA1000:03 Mathematical Foundations PREREQ: MA1020 or MA0020 or Maths Methods/Specialist Maths	Major MA1003:03 Mathematical Techniques PREREQ: MA1000 or MA1011 or MA1009
	Elective Select a subject from List 1 (Breadth Subjects)*	Elective Select a subject from List 1 (Breadth Subjects)

*Note: You may also take MA2211 in this place and take a List 1 subject later on.

**Note: You are strongly recommended to take MA2211 in this place and take an elective later on. ^Note: SC1109 is compulsory in the Advanced BSc Program and should be taken instead of SC1102 if you are considering that pathway.



	STUDY PERIOD 1	STUDY PERIOD 2
Year 2	Course SC2202:03 Quantitative Methods in Science PREREQ: SC1102 or SC1109 or SC2209:03 Quantitative Methods in Science-Advanced PREREQ: SC1109 and MA1003 plus 6 credit points of other Level 1 subjects	Course Select a subject from List 2 (Skills Subjects)
	Major MA2000:03 Mathematics for Scientists and Engineers PREREQ: MA1003	Major MA2210 :03 Linear Algebra <i>PREREQ: MA1003</i>
	Major MA2211:03 Discrete Mathematics PREREQ: Maths B or MA1020 or MA0020	Elective
	Elective	Elective

	STUDY PERIOD 1	STUDY PERIOD 2		
	Course			
Year 3	SC3008:03 Professional Placement			
	Select Availability in Study Period 1, 2, 3, 7 or 11 PREREQ: Students must have successfully completed 12 credit points of second year.			
	Enrolment is restricted to students with an approved placement			
	Major MA3211 :03 Mathematical Modelling and Differential Equations <i>PREREQ: MA2000 and (MA2210 or MA2201)</i>	Major MA3210:03 Probability and Stochastic Processes PREREQ: MA2000 and (MA2210 or MA2201)		
	Elective	Major MA3212 :03 Optimisation and Operations Research <i>PREREQ: MA2000 and (MA2210 or MA2201)</i>		
	Elective	Elective		
	Elective			



BREADTH SUBJECTS - LIST 1				
STUDY PERIOD 1		STUDY PERIOD 2		
BM1000:03 Introductory Biochemistry and Microbiology		BS1001:03 Introduction to Biological Processes		
BS1007:03 Introduction to Biodiversity		CH1002:03 Chemistry: Principles and Applications PREREQ: CH1001		
CH1001:03 Chemistry: A Central Science		EA1110:03 Evolution of the Earth		
EG1000:03 Engineering 1		MA1003:03 Mathematical Techniques PREREQ: MA1000		
EV1005:03 Environmental Processes and Global Change		MA1580:03 Foundations of Data Science		
MA1000:03 Mathematical Foundation		PH1007:03 Advanced Stream Physics 2 PREREQ: PH1005 OR (High School Physics and M		
PH1005:03 Advanced Stream Physics 1				
TRIMESTER 1	TRIMES	STER 2	TRIMESTER 3	
CP1401:03 Problem Solving and Programming I CP1401:03 Problem Solving and Programming I-* <i>EXTERNAL OFFERING</i>	CP1401:03 Problem Solving and Programming I-*EXTERNAL OFFERING		CP1404:03 Programming II CP1404:03 Programming II-*EXTERNAL OFFERING	
	CP1404:03 Programming II-*EXTERNAL OFFERING			

SKILL SUBJECTS - LIST 2				
STUDY PERIOD 1	STUDY PERIOD 2			
MA2000:03 Mathematics for Scientists and Engineers <i>PREREQ: MA1003</i>	CH2103:03 Analytical Chemistry PREREQ: CH1001 OR CH1011			
MA2830:03 Data Visualisation	EV2502:03 Introduction to Geographic Information Systems PREREQ: At least 12 credit points of level 1 subjects			
SC3010:03 Sensors and Sensing for Scientists PREREQ: SC2202 OR (SC2209 OR SC2201 OR BZ2001)	MA2210:03 Linear Algebra PREREQ: MA1003			

TRIMESTER 3

CP2404:03 Database Modelling CP2404:03 Database Modelling-*EXTERNAL OFFERING



ADDITIONAL INFORMATION

A maximum of 30 credit points may be taken at Level 1. A minimum of 18 credit points of science subjects must be taken at Level 3 or higher.

COURSE HANDBOOK

Bachelor of Science Handbook Mathematics Major