Bachelor of Science MAJOR Mathematics
MAJOR Choose a second major*

This study plan should be used as a general guide for your course. We recommend you consult with your CSE Course/Major Advisor 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: Subject Search
To register for your classes: Class Registration
For important dates check: Academic Calendars
Further enrolment resources: Enrolment Resources

	STUDY PERIOD 1	STUDY PERIOD 2
Year 1		**Course** CH1020:03 Preparatory Chemistry **OR** Select 3 credit points of any level 1, 2, 3 or 5 subjects (if completed high school level Chemistry or equivalent)
		Course MA1020:03 Preparatory Mathematics **OR** Select 3 credit points of any level 1, 2, 3 or 5 subjects (if completed high school level Maths Methods or equivalent)
		Second Major
		Elective **OR** Second Major Subject (Depending on chosen structure)

*Cairns-based students who have not previously completed senior Mathematical Methods, or equivalent, will need to complete MA1020 in SP3 2024 and choose an elective subject in SP2 2023

YEAR 2	TEACHING PERIOD 1		TEACHING PERIOD 2	
	Study Period 1	**Course** SC1101:03 Science, Technology, and Truth	Study Period 2	**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*
	Study Period 1	**Major** MA1000:03 Mathematical Foundations *PREREQ: MA1020 OR MA0020 OR Maths B OR Maths C*	Study Period 2	**Major** MA1003:03 Mathematical Techniques *PREREQ: MA1000 OR MA1011 OR MA1009*
	Study Period 1	**Second Major**	Study Period 2	**Second Major**
	Study Period 1		Study Period 2	**Second Major**

TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
Major MA2211:03 Discrete Mathematics *PREREQ: Maths B or MA1020 or MA0020*		

^Note: SC1109 is compulsory in the Advanced BSc Program and should be taken instead of SC1102 if you are considering that pathway.

Year 3	STUDY PERIOD 1	STUDY PERIOD 2
	Course SC2202:03 Quantitative Methods in Science *PREREQ: SC1102 or MA1020 or MA1000 or Mathematics B or equivalent* **OR** SC2209:03 Quantitative Methods in Science - Advanced *PREREQ: SC1109 and MA1003 plus 6 credit points of any level 1 subjects*	**Course** Select 3 credit points of subjects from **List 2**
	Major MA2000:03 Mathematics for Scientists and Engineers *PREREQ: MA10003*	**Major** MA2210:03 Linear Algebra *PREREQ: MA1003*
	Second Major	**Major** MA3210:03 Probability and Stochastic Processes *PREREQ: MA2000 and (MA2210 or MA2201)*

	Second Major	**Second Major**

	STUDY PERIOD 1	STUDY PERIOD 2
Year 4	**Course** SC3008:03 Professional Placement *PREREQ: 12 credit points of second year subjects and be enrolled in their final year of study within the College of Science and Engineering*	
	Major MA3211:03 Mathematical Modelling and Differential Equations *PREREQ: MA2000 and (MA2210 or MA2201)*	
	Major MA3212:03 Optimisation and Operations Research *PREREQ: MA2000 and (MA2210 or MA2201)*	
	Second Major	

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	TRIMESTER 2	TRIMESTER 3
CP1401:03 Problem Solving and Programming I CP1401:03 Problem Solving and Programming I-**EXTERNAL OFFERING*	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~~ ~~*PREREQ: MA1003*~~	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*

COURSE NOTES

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.

ADDITIONAL INFORMATION

Bachelor of Science Handbook
Mathematics Major