

RECOMMENDED STUDY PLAN

2022

DEGREE Bachelor of Science MAJOR Mathematics (MTM)

NAME _____ MAJOR Choose a second major

To assist you with subject information, we recommend you consult with your [CSE Course/Major Advisor](#) and refer to [Subject Search](#). If you would prefer a part-time study plan, please adjust the below planner, reviewing subject prerequisites to ensure you are on track for course completion.

	Study Period 1 - SP1	Study Period 2 - SP2
Year 1	Degree Core: <u>SC1101</u> Science Technology and Truth	Degree Option Core <u>SC1102</u> Modelling Natural Systems PREREQ: MA1020 OR <u>SC1109</u> Modelling Natural Systems-Advanced^ PREREQ: MA1000 OR MA1009
	Major Core: <u>MA1000</u> Mathematical Foundations PREREQ: MA1020 OR MATHEMATICS B OR MATHS C	Students who have not completed High School Chemistry (or equivalent) must take Degree Core: <u>CH1020</u> Preparatory Chemistry# #This subject is equivalent to chemistry from high school. OR Elective - if student has completed high school level Chemistry or equivalent
	Major Core:	Major Core: <u>MA1003</u> Mathematical Techniques PREREQ: MA1000 OR MA1011 OR MA1009
		Major Core:
	SP3 (Jan-Feb) Students who have not completed High School Maths Methods (or equivalent) must take Degree Core: <u>MA1020</u> Preparatory Math* *This subject is equivalent to QLD-Maths Methods from high school. OR Elective - if student has completed high school level Maths Methods or equivalent	

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

TSV students – please speak with your Advisor regarding different options for MA subject pathways.

	Study Period 1 - SP1	Study Period 2 - SP2
Year 2	Degree Option Core: <u>SC2202</u> Quantitative Methods in Science PREREQ: SC1102 OR MA1020 OR MA1000 OR MATHS B OR EQUIVALENT OR <u>SC2209</u> Quantitative Methods in Science-Advanced PREREQ: SC1109 AND MA1003 PLUS 6CP OF OTHER LEVEL 1 SUBJECTS	Degree Core Skill-List 2: <i>Subjects available across a number of study periods/trimesters, see list for full availabilities.</i>
	Major Core: <u>MA2000</u> Mathematics for Scientists and Engineers PREREQ: MA1003	Major Core: <u>MA2210</u> Linear Algebra PREREQ: MA1003
	Major Core: <u>MA2211</u> Discrete Mathematics PREREQ: MATHS B	Major Core:
	Major Core:	Major Core:

	Study Period 1 - SP1	Study Period 2 - SP2
Year 3	Degree Option Core: <u>SC3008</u> Professional Placement PREREQ: COMPLETED 12CP SECOND YEAR SUBJECTS AND BE ENROLLED IN THEIR FINAL YEAR OF STUDY OR <u>SC5008</u> Professional Placement – <i>Prior approval required</i> OR <u>SC3901</u> Special Topic 1– <i>Prior approval required</i> <i>All available in multiple study periods</i>	
	Major Core: <u>MA3211</u> Mathematical Modelling and Differential Equations PREREQ: MA2000 AND (MA2210 OR MA2201)	Major Core: <u>MA3210</u> Probability and Stochastic Processes PREREQ: MA2000 AND (MA2210 OR MA2201)
	Major Core:	Major Core: <u>MA3212</u> Optimisation and Operations Research PREREQ: MA2000 AND (MA2210 OR MA2201)
	Major Core:	Major Core:
	Elective	

Further Degree Options:

Skill-List 2:	
Study Period 1 – SP1	Study Period 2 – SP2
<u>MA2000</u> Mathematics for Scientists and Engineers - <i>already in major</i> PREREQ: MA1003	<u>CH2103</u> Analytical Chemistry – <i>TSV only</i> PREREQ: CH1001 OR CH1011
<u>MA2830</u> Data Visualisation	<u>EV2502</u> Introduction to Geographic Information Systems PREREQ: 12CP LEVEL 1 SUBJECTS
<u>SC3010</u> Sensors and Sensing for Scientists PREREQ: SC2202/SC2209	<u>MA2210</u> Linear Algebra PREREQ: MA1003
Trimester 3 (Sept-Dec)	
<u>CP2404</u> Database Modelling	

ADDITIONAL COURSE RULES

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 COURSE REQUIREMENTS

Some majors require attendance in intensive or mixed mode attendance subjects on either the Townsville or Cairns campus. If students must attend intensive mode classes at a campus other than the one they are enrolled at, they are responsible for their own expenses.

The first year of study may be completed in Cairns. Students must then transfer to Townsville.

COURSE PROGRESSION REQUISITES

Must successfully complete 18 credit points of Level 1 and 2 science subjects before attempting any Level 3 science subject

COURSE INCLUDES MANDATORY PROFESSIONAL PLACEMENT(S)

Yes

ADDITIONAL INFORMATION

[Bachelor of Science course handbook](#)

[Mathematics major handbook](#)