

## Bachelor of Science (Mathematics) – Cairns 2020 Beginning of Year Entry

### The first year of study may be completed in Cairns

Teaching Period 1, 2020		Teaching Period 2, 2020	
<a href="#">Study Period 1</a>	<b>First Major Subject</b> <a href="#">MA1000</a> :03 Mathematical Foundations PREREQ: MA1020 or Mathematics B or Maths C	<a href="#">Study Period 3/2</a>	<b>First Major Subject</b> <a href="#">MA1003</a> :03 Mathematical Techniques PREREQ: MA1000 or MA1011 or MA1009
<a href="#">Study Period 1</a>	<a href="#">SC1101</a> :03 Science, Technology and Truth	<a href="#">Study Period 2</a>	<a href="#">SC1102</a> :03 Modelling Natural Systems PREREQ: MA1020 or Senior Mathematics or equivalent <b>OR</b> <a href="#">SC1109</a> :03 Modelling Natural Systems-Advanced PREREQ: MA1000 or MA1009, allow concurrent enrolment for MA1009
<a href="#">Study Period 1</a>	Select 3 credit points of subjects from <a href="#">List 1 (Breadth Subjects)</a>	<a href="#">Study Period 2</a>	Select 3 credit points of subjects from <a href="#">List 1 (Breadth Subjects)</a>
<a href="#">Study Period 1</a>	Second Major Subject/Minor Subject/Elective Subject (depending on chosen structure)	<a href="#">Study Period 2</a>	Second Major Subject/Minor Subject/Elective Subject (depending on chosen structure)

### The second year onwards must be completed in Townsville

Teaching Period 1, 2021		Teaching Period 2, 2021	
<a href="#">Study Period 1</a>	<b>First Major Subject</b> <a href="#">MA2000</a> :03 Mathematics for Scientists and Engineers PREREQ: MA1003	<a href="#">Study Period 2</a>	<b>First Major Subject</b> <a href="#">MA2210</a> :03 Linear Algebra PREREQ: MA1003
<a href="#">Study Period 1</a>	<b>First Major Subject</b> <a href="#">MA2211</a> :03 Discrete Mathematics PREREQ: MA1020 or Maths B	<a href="#">Study Period 2</a>	Second Major Subject/Minor Subject/Elective Subject (depending on chosen structure)
<a href="#">Study Period 1</a>	<a href="#">SC2202</a> :03 Quantitative Methods in Science PREREQ: 6 credit points of Level 1 subjects <b>OR</b> <a href="#">SC2209</a> :03 Quantitative Methods in Science-Advanced PREREQ: SC1109 and MA1003 plus 6 credit points of other Level 1 subjects	<a href="#">Study Period 2</a>	Select 3cp of subjects from <a href="#">List 2 (Skills Subjects)</a>
<a href="#">Study Period 1</a>	Second Major Subject/Minor Subject/Elective Subject (depending on chosen structure)	<a href="#">Study Period 2</a>	Second Major Subject/Minor Subject/Elective Subject (depending on chosen structure)

Teaching Period 1, 2022		Teaching Period 2, 2022	
<a href="#">Study Period 1</a>	<b>First Major Subject</b> <a href="#">MA3211</a> :03 Mathematical Modelling and Differential Equations PREREQ: MA2000 and MA2210	<a href="#">Study Period 2</a>	<b>First Major Subject</b> <a href="#">MA3212</a> :03 Optimisation and Operations Research PREREQ: MA2000 and MA2210
<a href="#">Study Period 1</a>	<a href="#">SC3010</a> :03 Sensors and Sensing for Scientists PREREQ: BZ2001 or SC2202 or SC2209	<a href="#">Study Period 2</a>	<a href="#">SC3008</a> :03 Professional Placement PREREQ: Students must have successfully completed 12 second year credit points and be enrolled in their final year of study within the College of Science and Engineering
<a href="#">Study Period 1</a>	Second Major Subject/Minor Subject/Elective Subject (depending on chosen structure)	<a href="#">Study Period 2</a>	<b>First Major Subject</b> <a href="#">MA3210</a> :03 Probability and Stochastic Processes PREREQ: MA2000 and MA2210
<a href="#">Study Period 1</a>	Second Major Subject/Minor Subject/Elective Subject (depending on chosen structure)	<a href="#">Study Period 2</a>	Second Major Subject/Minor Subject/Elective Subject (depending on chosen structure)

#### ADDITIONAL COURSE REQUIREMENTS

Applicants who have not completed high school intermediate level Mathematics B (or equivalent) must select [MA1020](#): Preparatory Mathematics as part of their study plan to successfully complete the Bachelor of Science.

[CH1020](#): Preparatory Chemistry may also need to be selected, depending on the major. Students must familiarise themselves with the subjects needed to complete their chosen major.

Students should undertake the above subject/s in block mode where available and be aware that restrictions may apply to electives if they wish to complete in the normal three (3) year timeframe. These preparatory subjects typically start earlier than the standard course commencement date. Contact JCU on 1800 246 446 for more information.

#### POST ADMISSION REQUIREMENTS

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

#### COURSE PROGRESSION REQUIREMENTS

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

#### SPECIAL ADMISSION REQUIREMENTS

The first year of study may be completed in Cairns

Students undertaking this Major will have successfully completed senior Maths B or equivalent, or will need to complete the preparatory Maths subject within this course structure

#### ADDITIONAL INFORMATION

[Bachelor of Science course handbook](#)  
[Mathematics major handbook](#)