

## RECOMMENDED STUDY PLAN

2022

DEGREE Bachelor of Science MAJOR Marine Biology (MBY)

NAME \_\_\_\_\_ MAJOR Aquaculture Science and Technology (AQT)

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
<b>Year 1</b>	<b>Degree Core:</b> <u>SC1101</u> Science Technology and Truth	<b>Degree Option Core</b> <u>SC1102</u> Modelling Natural Systems PREREQ: MA1020 <b>OR</b> <u>SC1109</u> Modelling Natural Systems-Advanced^ PREREQ: MA1000 OR MA1009
	Students who have not completed High School Maths Methods (or equivalent) must take <b>Degree Core:</b> <u>MA1020</u> Preparatory Math* *This subject is equivalent to QLD-Maths Methods from high school. <b>OR</b> <b>Elective</b> - if student has completed high school level Maths Methods or equivalent	Students who have not completed High School Chemistry (or equivalent) must take <b>Degree Core:</b> <u>CH1020</u> Preparatory Chemistry# #This subject is equivalent to chemistry from high school. <b>OR</b> <b>Elective</b> - if student has completed high school level Chemistry or equivalent
	<b>Major Core:</b> <u>BS1007</u> Introduction to Biodiversity	<b>Major Core:</b> <u>BS1001</u> Introduction to Biological Processes
	<b>Major Core:</b> Select a subject from <u>Breadth-List 1</u>	<b>Major Core:</b> Select a subject from <u>Breadth-List 1</u>

^ 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 - SP1	Study Period 2 - SP2
<b>Year 2</b>	<b>Degree Option Core:</b> <u>SC2202</u> Quantitative Methods in Science PREREQ: SC1102 OR MA1020 OR MA1000 OR MATHS B OR EQUIVALENT <b>OR</b> <u>SC2209</u> Quantitative Methods in Science-Advanced PREREQ: SC1109 AND MA1003 PLUS 6CP OF OTHER LEVEL 1 SUBJECTS	<b>Degree Core Skill-List 2:</b> <i>Subjects available across a number of study periods/trimesters, see list for full availabilities.</i>
	<b>Major Core:</b> <u>MB2050</u> Functional Biology of Marine Organisms PREREQ: BS1007	<b>Major Core:</b> <u>BS2460</u> Fundamentals of Ecology PREREQ: 6CP LEVEL 1 OR 2 BZ/BS OR EV SUBJECTS
	<b>Major Core:</b> <u>BS2470</u> Evolution PREREQ: BS1001	Major Elective:
	<b>Major Core:</b> <u>AQ2001</u> Introduction to Aquaculture PREREQ: 12CP LEVEL 1 SCIENCE (BZ, CH, EA, EV, MA, MB, PH OR SC SUBJECTS)	

<b>SP7 (Jun-Jul)</b> <b>OR</b> <b>SP10 (Nov-Jan)</b>
<b>Major Option Core:</b> <u>AQ3003</u> Aquaculture: Propagation – <i>SP7</i> PREREQ: AQ2001 AND 12CP LEVEL 2 SCIENCE SUBJECTS (AQ, BC, BS, BZ, CH, EA, EV, MA, MB, PH, OR SC) <b>OR</b> <u>AQ3004</u> Aquaculture: Stock Improvement – <i>SP10</i> PREREQ: (12CP LEVEL 2 AQ, BC, BZ, BS, CH, EA, EV, MA, MB OR PH SCIENCE SUBJECTS) AND (3CP LEVEL 2 AQUACULTURE SUBJECTS).

		Study Period 1 - SP1	Study Period 2 - SP2
<b>Year 3</b>	<b>Degree Option Core:</b> <u>SC3008</u> Professional Placement PREREQ: COMPLETED 12CP SECOND YEAR SUBJECTS AND BE ENROLLED IN THEIR FINAL YEAR OF STUDY <b>OR</b> <u>SC5008</u> Professional Placement – <i>Prior approval required</i> <b>OR</b> <u>SC3901</u> Special Topic 1– <i>Prior approval required</i> <i>All available in multiple study periods</i>		
	<b>Major Core:</b> <u>MB3050</u> Biological Oceanography PREREQ: BS1007 AND MB2050 AND SC2202/SC2209	<b>Major Option Core:</b> <u>MB3190</u> Coral Reef Ecology PREREQ: CREDIT OR BETTER IN BS2460 <b>OR</b> <u>MB3270</u> Coastal, Estuarine and Mangrove Ecosystems PREREQ: BS1007 AND (MB2050 OR BS2460) AND SC2202/SC2209	
	<b>Major Option Core:</b> <u>MB3210</u> Life History and Evolution of Reef Corals PREREQ: SC2202/SC2209 AND AT LEAST A RESULT OF CREDIT IN BS2460 <b>OR</b> <u>MB3160</u> Evolution and Ecology of Reef Fishes PREREQ: MB2050 AND BS2460 AND A MINIMUM RESULT OF CREDIT IN BS2470 OR MB2070	Elective	
	<b>Major Core:</b> <u>MI2031</u> Diagnosis of Bacterial Diseases in Aquaculture		
	<b>Major Core:</b> <u>AQ3002</u> Aquaculture: Feeds and Nutrition PREREQ: (12CP LEVEL 2 AQ, BC, BZ, BS, CH, EA, EV, MA, MB OR PH SCIENCE SUBJECTS) AND (3CP LEVEL 2 AQUACULTURE SUBJECTS).		
<b>SP3 (Jan-Feb)</b>			
<b>Major Core:</b> <u>AQ3015</u> Sustainable Aquaculture PREREQ: 12CP LEVEL 2 SUBJECTS			

**Further Degree Options:**

<b>Breadth-List 1:</b>	
<b>Study Period 1 – SP1</b>	<b>Study Period 2 – SP2</b>
<u>BM1000</u> Introductory Biochemistry and Microbiology – <i>TSV only</i> PREREQ: CH1020 OR SENIOR CHEMISTRY	<u>CH1002</u> Chemistry: Principles & Applications – <i>TSV only</i> PREREQ: CH1001 OR CH1011
<u>CH1001</u> Chemistry: A Central Science PREREQ: CH1020 OR EG1010 OR SENIOR CHEMISTRY	<u>EA1110</u> Evolution of the Earth
<u>EG1000</u> Engineering 1	<u>MA1003</u> Mathematical Techniques PREREQ: MA1000 OR MA1011 OR MA1009
<u>EV1005</u> Environmental Processes & Global Change	<u>MA1580</u> Foundations of Data Science PREREQ: MA1000 OR MA1020 OR MATHS B
<u>MA1000</u> Mathematical Foundations PREREQ: MA1020 OR MATHEMATICS B OR MATHS C	<u>PH1007</u> Advanced Stream Physics 2 – <i>TSV only</i> PREREQ: ((MATHS B OR EQUIVALENT OR MA1020) AND PH1005) OR (PHYSICS AND MATHS C)
<u>PH1005</u> Advanced Stream Physics 1 PREREQ: Maths B OR MA1020 OR MA1000 OR MA1008.	
<b>Trimester 1</b> (Feb-May)	<b>Trimester 3</b> (Sept-Dec)
<u>CP1401</u> Problem Solving and Programming I	<u>CP1404</u> Programming II PREREQ: CP1401 OR EG1002

<b>Skill-List 2:</b>	
<b>Study Period 1 – SP1</b>	<b>Study Period 2 – SP2</b>
<u>MA2000</u> Mathematics for Scientists and Engineers 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
	<b>Trimester 3</b> (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](#)

[Marine Biology major handbook](#)

[Aquaculture Science and Technology major handbook](#)