

## RECOMMENDED STUDY PLAN

2022

DEGREE Bachelor of Science MAJOR Zoology & Ecology (ZAE)

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> BS2470 Evolution PREREQ: BS1001 OR BZ1005	<b>Major Core:</b> BS2460 Fundamentals of Ecology PREREQ: 6CP OF LEVEL 1 SUBJECTS OR 2 BS/BZ/EV SUBJECTS
	<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)	Major Elective:
	<b>Major Core:</b> <u>MI2031</u> Diagnosis of Bacterial Diseases in Aquaculture	

<b>SP7 (Jun-Jul)</b>
<b>Major Core:</b> <u>BZ2490</u> Toolkit for the Field Biologist PREREQ: SC2202/SC2209

	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>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>Major Option Core:</b> <u>BZ3061</u> Behavioural Ecology (SP2) PREREQ: SC2202/SC2209 AND 6CP LEVEL 2 SCIENCE <b>OR</b> <u>BZ3745</u> – Tropical Entomology (SP3) - <i>CNS ONLY</i> PREREQ: SC2202/SC2209 /SC5202 AND BS1007
	Elective	<b>Major Core:</b> <u>BZ3220</u> Population and Community Ecology PREREQ: SC2202/SC2209 /SC5202 AND BS2460 OR 3CP LEVEL 2 BZ

<b>SP3 (Jan-Feb)</b>	<b>SP7 (Jun-Jul)</b> <b>OR</b> <b>SP10 (Nov-Jan)</b>	<b>SP10 (Nov-Feb)</b>
<b>Major Core:</b> <u>AQ3015</u> Sustainable Aquaculture PREREQ: 12CP LEVEL 2 SUBJECTS	<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).	<b>Major Option Core:</b> <u>BZ3230</u> Ecological Research Methods PREREQ: SC2202/SC2209 AND (BS2460 OR BZ2880) <b>OR</b> <u>BZ3001</u> Field Studies in the Equatorial Tropics: Borneo ASSUMED KNOWLEDGE – students should have a statistics subject equivalent to SC2202/SC2209 AND an ecology subject equivalent to BS2460.

**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.

#### **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](#)

[Zoology & Ecology major handbook](#)

[Aquaculture Science and Technology major handbook](#)