

RECOMMENDED STUDY PLAN

2022

DEGREE Bachelor of Advanced Science MAJOR Advanced Molecular and Cell Biology (MCB)

NAME _____

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 Core: <u>SC1109</u> Modelling Natural Systems-Advanced PREREQ: MA1000 OR MA1009
	Degree Core: <u>MA1000</u> Mathematical Foundations PREREQ: MA1020 OR MATHEMATICS B OR MATHS C	Degree Core: <u>MA1003</u> Mathematical Techniques PREREQ: MA1000 OR MA1011 OR MA1009
	<u>BM1000</u> Introductory Biochemistry and Microbiology PREREQ: CH1020 OR SENIOR CHEMISTRY	Major Core: <u>BS1001</u> Introduction to Biological Processes
		Elective:

SP3 (Jan-Feb)

Students who have not completed High School Chemistry (or equivalent) must take
Degree Core: CH1020 Preparatory Chemistry#
#This subject is equivalent to chemistry from high school.

OR

Elective - if student has completed high school level Chemistry or equivalent

	Study Period 1 - SP1	Study Period 2 - SP2
Year 2	<u>SC2209</u> Quantitative Methods in Science-Advanced PREREQ: SC1109 AND MA1003 PLUS 6CP OF OTHER LEVEL 1 SUBJECTS	Major Core: <u>BC2023</u> Molecular Genetics PREREQ: 18CP LEVEL 1 SUBJECTS INCLUDING BM1000
	Major Core: <u>BC2013</u> Principles of Biochemistry PREREQ: 18CP LEVEL 1 SUBJECTS WHICH INCLUDES BM1000 AND BS1001	Major Core: <u>BC2024</u> Principles of Molecular Cell Biology PREREQ: 18CP LEVEL 1 SUBJECTS INCLUDING BM1000
	Elective:	Elective: <i>Recommended – 2nd year subject from the BSc Skills list 2 (Table below)</i>
	Elective:	Elective:

	Study Period 1 - SP1	Study Period 2 - SP2
Year 3	Degree Option Core: <u>SC3008</u> Professional Placement PREREQ: COMPLETED 12CP SECOND YEAR SUBJECTS OR <u>SC3003</u> Science Research Internship PREREQ: 15CP OF AQ, BC, BS, BZ, CH, EV, EA, MA, MB, PH OR SC SCIENCE LEVEL 2 SUBJECTS <i>All available in multiple study periods</i>	
	Major Core: <u>BC5101</u> Advanced Genes, Genomes, and Development	Major Core: <u>BC5201</u> Advanced Bioengineering
	Major Core: <u>BC5102</u> Advanced Molecular Basis of Disease	Elective: <u>BC3202</u> Special Topics in Biochemistry and Molecular Biology - Recommended PREREQ: BC2013 AND BC2023 AND BC2024
	Degree Core List 1:	Elective: <u>BC3203</u> Bioinformatics - Recommended PREREQ: SC2202/SC2209 OR MA2405 OR (BC3101 AND HS2402)
	Elective:	

Further Degree Options:

Degree Core List 1: Advanced Skill Subjects	
Study Period 1 – SP1	Study Period 2 – SP2
<u>BS5260</u> Modelling Ecological Dynamics	<u>BC5203</u> Advanced Bioinformatics
<u>MA2000</u> Mathematics for Scientists and Engineers	<u>SC5502</u> Design and Analyses in Ecological Studies
<u>EA5409</u> Mineralogy and Geophysics – Not currently offered	<u>CH5002</u> Research Skills and Communication in Chemistry (Adv)
	<u>PH5014</u> Research Skills and Communication in Physics (Advanced) – Not currently offered

BSc Skill-List 2:	
Study Period 1 – SP1	Study Period 2 – SP2
<u>MA2000</u> Mathematics for Scientists and Engineers PREREQ: MA1003	<u>CH2103</u> Analytical Chemistry – TSV only 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.

COURSE PROGRESSION REQUISITES

Must successfully complete 18 credit points of Level 2 science subjects before attempting any Level 5 science subject

ADDITIONAL INFORMATION

[Bachelor of Advanced Science course handbook](#)

[Advanced Molecular and Cell Biology major handbook](#)