

#### **Bachelor of Advanced Science**

## MAJOR Marine Biology

# SECOND MAJOR Aquaculture Science and Technology

This study plan should be used as a general guide for your course. We recommend you consult with your <u>CSE</u> <u>Course/Major Advisor</u> and particularly if your intended enrolment varies from this plan.

The information in the study plan is current at the time of creation and may be subject to future change. If you would prefer a part-time study plan, please adjust the below study planner; reviewing subject prerequisites to ensure you are on track for course completion.

Useful study planning/enrolment resources:

To search for information on subjects: <u>Subject Search</u>
To register for your classes: <u>Class Registration</u>

For important dates check: <u>Academic Calendars</u>
Further enrolment resources: <u>Enrolment Resources</u>

\*NOTE- students studying this as a second major in conjunction with the Marine Biology Major have subject overlaps. Subject content contained in BS1007, BS1001 and BS2470 is completed as part of the Marine Biology Major and this has been taken into account in your study plan.

	STUDY PERIOD 1	STUDY PERIOD 2
Year 1	Course SC1101:03 Science, Technology and Truth	Course MA1003:03 Mathematical Techniques PREREQ: MA1000 or MA1011 or MA1009
	Course MA1000:03 Mathematical Foundations PREREQ: MA1020 or MA0020 or Maths C	Course SC1109:03 Modelling Natural Systems-Advanced PREREQ: MA1000 or MA1009
	Course CH1020:03 Preparatory Chemistry (or any Level 1, 2, 3 or 5 subject if already satisfied via previous study)	Major BS1001:03 Introduction to Biological Processes
	Major BS1007:03 Introduction to Biodiversity	Second Major Select 3 credit points of subjects from List 1 (Breadth Subjects)



STUDY PERIOD 1	STUDY PERIOD 2
Course SC2209:03 Quantitative Methods in Science-Advanced PREREQ: MA1003 and (SC1109 plus 6 credit points of other Level 1 subjects)	Course Select 3 credit points of subjects from List 1 (Advanced Skill Subjects)
Major	Major
BS2470:03 Evolution	BS2460:03 Fundamentals of Ecology
PREREQ: BZ1001 or BS1001 or BZ1005	PREREQ: 6 credit points of Level 1 or 2 BZ/BS or EV subjects
Major	Second Major
MB2050:03 Functional Biology of Marine Organisms	Select 3 credit points of subjects from List 1



	STUDY PERIOD 1		STUDY PERIOD 2	
Year 3	Major MB3210:03 Life History and Evolution of Reef Corals PREREQ: (SC2202 or SC2209 or BS2001 or BZ2001 or AG2001) and at least a result of credit in MB2060 or BS2460 OR MB3160:03 Evolution and Ecology of Reef Fishes PREREQ: MB2050 and (MB2060 or BS2460) and a minimum mark of credit in BS2470 or MB2070 (or MB5070 or equivalent)		Course SC3003:03 Science Research Internship (SP1, SP2, SP3, SP7, SP11) PREREQ: 15 credit points of AQ, BC, BS, BZ, CH, EV, EA, MA, MB, PH or SC science level 2 subjects OR SC3008:03 Professional Placement* (SP1, SP2, SP3, SP7, SP11) PREREQ: Must have successfully completed 12 second year credit points. Enrolment is restricted to students with an approved placement	
	Major MB3050:03 Biological Oceanography PREREQ: (BS1007 or BZ1007) and MB2050 and (SC2202 or SC2209 or BS2001 or BZ2001)		Major MB3190:03 Coral Reef Ecology PREREQ: Credit or better in MB2060 or BS2460 OR MB3270:03 Wetland and Estuarine Ecosystems PREREQ: BS1007 or BZ1007 and (MB2050 or BS2460) and (SC2202 or SC2209 or BS2001 or BZ2001)	
	Second Major AQ3002:03 Aquaculture: Feeds and Nutrition PREREQ: At least 12 credit points of Level 2 AQ, BC, BZ, BS, CH, EA, EV, MA, MB or PH science subjects and 3 credit points of level 2 aquaculture subjects.		Second Major Select 3 credit points of any level 1, 2, 3 or 5 subject	
	Second Major MI2031:03 Diagnosis of Bacterial D Aquaculture	iseases in		
	STUDY PERIOD 3 (Jan-Feb)	STUDY PE (Jun-Ju		STUDY PERIOD 10 (Nov-Jan)
	Second Major AQ3015:03 Sustainable Aquaculture PREREQ: 12 credit points of level 2 subjects			



BREADTH SUBJECTS - LIST 1				
STUDY PERIOD 1	STUDY PERIOD 2			
BM1000:03 Introductory Biochemistry and Microbiology PREREQ: Allow concurrent enrolment in CH1020, CH0020 or Senior Chemistry	CH1002:03 Chemistry: Principles and Applications PREREQ: CH1001 OR CH1011 and allow concurrent for Ch1011 and CH1001			
CH1001:03 Chemistry: A Central Science PREREQ: CH1020, CH0020 or EG1010 or High School Senior Chemistry	EA1110:03 Evolution of the Earth			
EG1000:03 Engineering 1	MA1003:03 Mathematical Techniques PREREQ: MA1000 or MA1011 or MA1009			
EV1005:03 Environmental Processes and Global Change	MA1580:03 Foundations of Data Science PREREQ: MA1000 or MA1020 or MA0020 or Maths B			
MA1000:03 Mathematical Foundation PREREQ: MA1020 or MA0020 or Maths B or Maths C	PH1007:03 Advanced Stream Physics 2 PREREQ: ((Maths B or equivalent or MA1020 or MA0020) and PH1005) or (Physics and Maths C)			
PH1005:03 Advanced Stream Physics 1 PREREQ: MA1000				

TRIMESTER 1	TRIMESTER 2	TRIMESTER 3
CP1401:03 Problem Solving and Programming I	CP1401:03 Problem Solving and Programming I *External	CP1404:03 Programming II  PREREQ: CP1801 or CP1401 or CP1200 or EG1002 or CP2200 or SC1201
	CP1404:03 Programming II *External	

ADVANCED SKILL SUBJECTS - LIST 1			
STUDY PERIOD 1	STUDY PERIOD 2		
BS5260:03 Modelling Ecological Dynamics	BC5203:03 Advanced Bioinformatics		
MA2000:03 Mathematics for Scientists and Engineers PREREQ: MA1003	CH5002:03 Research Skills and Communication in Chemistry (Advanced)  PREREQ: Satisfactory completion of 9 credit points of Level 2, 3 or 5 CH subjects		
EA5409:03 Mineralogy and Geophysics	SC5502:03 Design and Analyses in Ecological Studies		
PH5014:03 Research Skills and Communication in Physics (Advanced)			



### ADDITIONAL INFORMATION

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.

### COURSE HANDBOOK

Bachelor of Advanced Science Handbook