

# RECOMMENDED STUDY PLAN

2018-2019

NAME \_\_\_\_\_ STUDENT NUMBER \_\_\_\_\_

DEGREE PROGRAM Master of Science MAJOR Marine Biology (MSC-MBY)

## Level 5: Year 1

SP3	SP1	SP6/7	SP2	SP10/SP11
	<b>Major Core:</b> MB5055 Biological Oceanography	<b>Major Skill Core:</b> MB5300 Sampling and Experimental Design #	<b>Major Core:</b> MB5190 Coral Reef Ecology	<b>Major Opt Skill Core-List B</b>
	<b>Major Opt Skill Core-List B</b> SC5202-Required if you have not already completed a statistics subject at university	<b>OR</b> SC5502:03 Design and Analyses in Ecological Studies-NEW 2019^	<b>Major Core:</b> MB5270 Coastal and Mangrove Ecosystems	
	<b>Elective:</b>		<b>Major Core:</b> MB5004 Marine Conservation Biology	
			<b>Major Opt Skill Core-List A</b>	

*Note-Boxes without specific subjects listed in them may be rearranged to meet your course needs as long as the total number of subjects and degree structure is met. For example, you may choose to move a SP1 elective in Year 1 to SP7 in Year 2.*

*#Note-Prerequisite for this subject is a basic univariate statistics course from university.*

*^Note-SC5502 is NEW for 2019 and is in SP2.*

## Level 5: Year 2

SP3	SP1	SP6/7
	<b>Elective:</b>	
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## Additional Notes:

The Master of Science degree has the following structure:

1. 4 subjects/12cp of theory for your MAJOR CORE
2. 4 subjects/12cp of SKILL subjects for your major
  - a. 1 compulsory skill subject for your major

- b. 1 skill subject from List A
- c. 2 skill subjects from List B
- 3. 4 subjects/12cp of ELECTIVES (see recommended list below)

It is generally recommended to take 8 subjects per year, with 3 - 4 in SP1 and SP2 and additional subjects in block mode periods (SP3, SP7, SP10 /11) as necessary.

You need to have fulfilled the 'Assumed Knowledge' or Prerequisites for any subject, before you take them. These are listed in the subject's description online which can be found by searching for a subject within **Subject Search** (<https://secure.jcu.edu.au/app/studyfinder/>). For example, EV5502-Advanced GIS assumes you have already taken EV5505--Introduction to GIS or an equivalent at JCU or at your previous university.

Full subject descriptions and timings of all subjects can be found online using the Subject Search tool.

### Skill Subjects:

In addition to the **Major Core Skill Subject** (MB5300 OR SC5502), choose 1 subject from **List A** and 2 subjects from **List B**. You must meet the Assumed Knowledge or Prerequisites for any subject selected. See Additional Notes for more details.

Optional Skill Subjects-List A (Select 1 subject)		
SP1	SP2	SP9/SP10/SP11
BS5260 Modelling Ecological Dynamics- <i>Next availability 2019</i>	BZ5450 Ecological and Conservation Genetics	EV5502 Advanced Geographic Information Systems *
	EV5110 Environmental and Social Impact Assessment	<i>*Note there is an error in the course paperwork. EV5502 is the option and <b>NOT</b> EV5505:03 Introduction to GIS as your online study plan may indicate.</i>
	SC5502 Design and Analyses in Ecological Studies	EV5506 Remote Sensing-CNS LTD

Optional Skill Subjects-List B (Select 2 subjects)			
SP1	SP6/7	SP2	SP10/SP11
SC5202 Quantitative Methods in Science	BZ5990 Toolkit for the Field Biologist	BC5203 Advanced Bioinformatics	AQ5004 Aquaculture Stock Improvement

BS5260 Modelling Ecological Dynamics- <i>Next availability 2019</i>	EA5018 Field Studies in Tropical Land & Water Science	BZ5450 Ecological & Conservation Genetics	EV5502 Advanced Geographic Information Systems
	EA5330 Field Techniques <i>Note-This subject be substituted with EA5044-Geological Mapping in 2019</i>	CH5203 Analytical Chemistry-Advanced	EV5506 Remote Sensing
	SC5232 Marine Sensor Technologies and Applications- <i>NEW 2019</i>	EV5110 Environmental and Social Impact Assessment	
		EV5505 Introduction to Geographic Information Systems	EA5640 Advanced Marine Geoscience Technologies& Applications
		MA5405 Data Mining	
		SC5502 Design and Analysis in Ecological Studies- <i>NEW 2019</i>	

### Elective subjects:

Your degree structure allows you to take 4 subjects/12 cp from any Level 5 subject with a prefix subject code of: AQ, BS, BZ, CH, EA, EV, MA, MB, MI, SC or TV.

**Recommended elective subjects for this Major:** The recommended elective subject sets for specific career pathways and/or or study areas:

TOPIC	STUDY PERIOD
<i>Coral Reefs</i>	
MB5400:03 Life history & evolution of reef corals	1
EV5406:03 Coral Reef Geomorphology	1
MB5160:03 Evolution and Ecology of Reef Fishes	2
MB5190:03 Coral Reef Ecology	2
<i>Taxa specialisations</i>	
MB5160:03 Evolution and Ecology of Reef Fishes	1
MB5400:03 Life History & Evolution of Reef Corals	1
MB5204:03 Conserving Marine Wildlife: Sea Mammals, Birds and Reptiles	1
MB5380:03 Invertebrate Biology	2

<i>Ecology</i>	
MB5160:03 Evolution and Ecology of Reef Fishes	1
AQ5007:03 Aquatic Animal Ecophysiology	2
MB5270:03 Coastal, Estuarine & Mangrove Ecosystems	2
MB5450:03 Behaviour of Marine Animals	7
<i>Biology</i>	
MB5160:03 Evolution and Ecology of Reef Fishes	1
MB5400:03 Life History & Evolution of Reef Corals	1
MI5003:03 Advanced Marine Microbiology	1
MB5380:03 Invertebrate Biology	2
AQ5007:03 Aquatic Animal Ecophysiology	2
MB5070:03 Marine Biogeography	1
<i>Foundations</i>	
BS5470:03 Evolution	1
MB5380:03 Invertebrate Biology	2
BS5460:03 Fundamentals of Ecology	2
<i>Applied Studies: Fisheries &amp; Aquaculture</i>	
MB5310:03 Marine Reserves as Fisheries Management Tools	3
AQ5006:03 Principles and Practices of Aquaculture	1
MB5003:03 Fisheries Science	1
AQ5015:03 Sustainable Aquaculture	3
MB5610:03 Fishing Gear and Technologies	2
MB5014:03 Managing Tropical Fisheries	11
<i>Applications for Conservation</i>	

EV5020:03 Human Dimensions of Nature, Environment and Conservation	1
EV5107:03 Environmental Management Policy & Governance	3
BZ5450:03 Ecological & Conservation Genetics	2
EV5003:03 Environmental Economics	2
EV5209:03 Principles and Practices of Protected Area Management	7 (2019, Galapagos)
<i>Coastal Resource Management</i>	
EV5406:03 Coral Reef Geomorphology	1
MB5204:03 Conserving Marine Wildlife: Sea Mammals, Birds and Reptiles	1
EV5020:03 Human Dimensions of Nature, Environment and Conservation	1
EV5701:03 Managing Coastal and Marine Environments	1
MB5270:03 Coastal, Estuarine & Mangrove Ecosystems	2
<i>Unique Ecosystems</i>	
SC5810 Marine Ecology and Upwelling	7 (Galapagos)
MB5001:03 Tropical Marine Ecology and Coastal Impacts	11 (Thailand)