

RECOMMENDED STUDY PLAN

2022

DEGREE Master of Science

MAJOR Marine Biology (MBY)

NAME _____

STUDENT NUMBER _____

Course information – Master of Science

The Master of Science degree is structured such that students take sets of foundational ‘*knowledge*’ specific to their major, technical and / or analytical ‘*skills*’ subjects, *elective* subjects.

Use this document to plan out what subjects you will take and when. Consult with your course advisor about the nature of subjects, research and internship pathways and any queries you may have. The course advisor for each major in the Master of Science programs is listed [here](#). When you are ready to enrol in subjects proceed to your eStudent account.

For more information relevant to the degree see the JCU Course handbook for the [Master of Science](#).

Students wishing to take a semester long internship or research project need to transfer to the [Master of Science \(Professional\)](#) degree. This should be done before you start your course.

Marine Biology major structure

1. Take the following 3 **Knowledge** subjects:
 - 1.1. [MB5000](#) Advances in Marine Biology (SP8 2022)
 - 1.2. [MB5004](#) Marine Conservation Biology (SP2)
 - 1.3. [MB5350](#) Evidence and Controversy in Marine Science (not available until SP1 2023)*
**students can request to take MB5620 Grand Challenges in Fisheries (SP1) OR MB5204 Conserving Marine Wildlife: Sea Mammals, Birds, and Reptiles (SP1) instead of MB5350 in 2022.*

2. Take these **Skills** subjects:
 - 2.1. [SC5200](#) Professional Employability (SP1 OR SP2)
AND
 - 2.2. [SC5502](#) Design and Analyses in Ecological Studies (SP2)

AND take 1 of these advanced skill subjects (Major Core Option):

 - 2.3. [BS5260](#) Modelling Ecological Dynamics (SP1)
 - 2.4. [BZ5450](#) Ecological and Conservation Genetics (SP2)
 - 2.5. [EV5110](#) Environmental and Social Impact Assessment (SP2)
 - 2.6. [EV5502](#) Advanced Geographic Information Systems (SP11)
 - 2.7. [EV5506](#) Remote Sensing (SP9)

AND take 1 additional skill subject from [List 1](#)

3. Take 5 **Elective** subjects

If you are planning to transfer to the Master of Marine Biology, you need to select at least 3 subjects from one of the streams listed below.

Descriptions and availabilities of all subjects can be found online using the [Subject Search](#) tool. Use this to explore your subject options. Each subject is usually only offered once per year, in the 'study period' stated on Subject Search. It is generally recommended to take 8 subjects per year, with 3 or 4 in each main semester (Study Period 1 and 2), and additional subjects in the block mode (intensive) periods (SP3, SP7, SP10 /11) as necessary. An explanation to JCU's academic calendar can be found [here](#).

Multiple subjects can be taken consecutively in a block mode period as long as the face-to-face teaching dates do not overlap. These dates are displayed on the Subject Search tool. For example in SP11 (November) a student can take both EV5502 and EA5640.

Please note that availability of some subjects sometimes changes. While such changes are rare, students should check when a subject is being taught using the Subject Search tool above.

For any subject you need to have fulfilled the 'Assumed Knowledge' and / or Pre-requisites before you take them. These are listed in the subject's description. For example, EV5502 assumes you have already taken EV5505 or an equivalent at JCU or at your previous university. Speak with your course advisor for more assistance on this.

Where a subject includes overnight field trips this is noted in the subject's description on [Subject Search](#). Additional fees apply to cover trip transport, accommodation and food expenses for these field trips.

YOUR STUDY PLANNER

Fill in the cells below with your planned subjects. You can re-arrange when you take your skill and elective subjects depending on when your preferred unit is taught. Aim to complete all your core & skill subjects in your first year of study. You will normally start your program in either Study Period 1 (SP1) or Study Period 2 (SP2). Pink are core subjects.

February start

Year 1 Take 8 subjects (24 credit points) with approx. 4 subjects per 6 month Teaching Period

Teaching Period 1 (January-Jun)			Teaching Period 2 (July-December)	
Study Period 3 (Jan-Feb)	Study Period 1 (Feb-May)	SP 6 (May-Jul) SP 7 (Jun-Jul) SP 8 (Jul-Oct)	Study Period 2 (Jul-Nov)	SP 9 (Sept-Nov) SP 10 (Nov-Jan) SP 11 (Nov-Feb)
	Major Core: <u>SC5200</u> Professional Employability – available SP1 & SP2	Major Core: <u>MB5000</u> Advances in Marine Biology	Major Core: <u>MB5004</u> Marine Conservation Biology	
	Major Core Option: Select 1 subject from the list above. Can take this subject anywhere within this year		Major Core: <u>SC5502</u> Design and Analyses in Ecological Studies	
	Skill or Elective		Skill or Elective	
			Skill or Elective	

Year 2 Take 12 credit points in Teaching Period1

Teaching Period 1 (January-Jun)		
Study Period 3 (Jan-Feb)	Study Period 1 (Feb-May)	Study Period 6 (May-Jul) Study Period 7 (Jun-Jul)
	Major Core: <u>MB5350</u> Evidence and Controversy in Marine Science <i>(Not offered in 2022)</i>	
	Skill or Elective	
	Skill or Elective	
	Skill or Elective	

July start

Year 1: Take 4 subjects (or 12 credit points) in teaching period 2.

Teaching Period 2 (July-December)	
Study Period 2 (Jul-Nov)	SP 9 (Sept-Nov) SP 10 (Nov-Jan) SP 11 (Nov-Feb)
Major Core: <u>MB5004</u> Marine Conservation Biology	
Major Core: <u>SC5502</u> Design and Analyses in Ecological Studies	
Skill or Elective	
Skill or Elective	

Year 1-2: Take 24 credit points, with 12 credit points per Teaching Period

Teaching Period 1 (January-Jun)			Teaching Period 2 (July-December)	
SP 3 (Jan-Feb)	Study Period 1 (Feb-May)	SP 6 (May-Jul) SP 7 (Jun-Jul)	Study Period 2 (Jul-Nov)	SP 9 (Sept-Nov) SP 10 (Nov-Jan) SP 11 (Nov-Feb)
	Major Core: <u>SC5200</u> Professional Employability – available SP1 & SP2	Major Core: <u>MB5000</u> Advances in Marine Biology	Skill or Elective	Skill or Elective
	Major Core Option: Select 1 subject from the list above. Can take this subject anywhere within this year		Skill or Elective	
	Major Core: <u>MB5350</u> Evidence and Controversy in Marine Science		Skill or Elective	

List 1. Additional Skill Subjects (Select 1)

Study Period 3 (Jan-Feb)	Study Period 1 (Feb-Jun)	Study Period 6 (May-Jul) Study Period 7 (Jun-Jul)	Study Period 2 (Jul-Nov)	Study Period 9 (Sept-Nov) Study Period 10 (Nov-Jan) Study Period 11 (Nov-Feb)
<u>EV5020</u> Human Dimensions of Nature, Environment and Conservation	<u>BS5260</u> Modelling Ecological Dynamics	SP6 <u>EA5018</u> Field Studies in Tropical Land and Water Science	<u>BC5203</u> Advanced Bioinformatics	SP10 <u>AQ5004</u> Aquaculture: Stock Improvement
		SP6 <u>EA5044</u> Geological Mapping	<u>BZ5450</u> Ecological and Conservation Genetics	SP9 <u>EV5506</u> Remote Sensing
	<u>SC5202</u> Quantitative Methods in Science	SP7 <u>BZ5990</u> Toolkit for the Field Biologist	<u>CH5203</u> Analytical Chemistry (Advanced)	SP11 <u>EA5640</u> Advanced Marine Geoscience Technologies and Applications
		SP7 <u>EA5330</u> Field Techniques	<u>EV5110</u> Environmental and Social Impact Assessment	SP11 <u>EV5502</u> Advanced Geographic Information Systems
			<u>EV5505</u> Introduction to Geographic Information Systems	
<u>MA5405</u> Data Mining				
<u>SC5502</u> Design and Analyses in Ecological Studies				

List 2. Elective Subjects

You can take any Level 5 subject with a prefix subject code of: AQ, BS, BZ, CH, EA, EV, MA, MB, MI, SC or TV. Other subjects can also be approved by your advisor.

Use [Subject Search](#) to review the units and check the study period they are offered in.

Recommended elective subjects for the MARINE BIOLOGY Major - These are our recommended and most popular units in your major.

TOPIC	STUDY PERIOD
<i>Coral Reef Science</i>	
MB5400:03 Life History & Evolution of Reef Corals	1
MB5055:03 Biological Oceanography	1
EV5406:03 Coral Reef Geomorphology	1
MB5160:03 Evolution and Ecology of Reef Fishes	1
MB5190:03 Coral Reef Ecology	2
MB5004:03 Marine Conservation Biology	2
MB5310:03 Marine Reserves as Fisheries Management Tools	3
SC5810:03 Marine Ecology & Upwelling (<i>Not available in 2022</i>)	7 (Galapagos)
MB5001:01 Tropical Marine Ecosystems and Coastal Impacts	11 (Thailand)
<i>Marine Conservation & Management</i>	
EV5020:03 Human Dimensions of Nature, Environment and Conservation	3
MB5204:03 Conserving Marine Wildlife: Sea Mammals, Birds and Reptiles	1
EV5701:03 Coastal and Marine Management and Conservation	1
MB5620:03 Grand Challenges in Fisheries	1
MB5270:03 Coastal, Estuarine & Mangrove Ecosystems	2
MB5004:03 Marine Conservation Biology	2
MB5014:03 Managing Tropical Fisheries	11
MB5001:01 Tropical Marine Ecosystems and Coastal Impacts	11 (Thailand)
<i>Marine Genomics</i>	
BC5101:03 Advanced Genes, Genomes and Development	1
MI5003:03 Diagnosis of Bacterial Diseases in Aquaculture	1
BS5470:03 Evolution	1
MB5070:03 Marine Biogeography	1
AQ5007:03 Aquatic Animal Ecophysiology	2
BZ5450:03 Ecological and Conservation Genetics	2
BC5203:03 Advanced Bioinformatics	2
MB5004:03 Marine Conservation Biology	2
AQ5004:03 Aquaculture Stock Improvement	10
<i>Fisheries Science</i>	
EV5020:03 Human Dimensions of Nature, Environment and Conservation	3
MB5310:03 Marine Reserves as Fisheries Management Tools	3
AQ5015:03 Sustainable Aquaculture	3
AQ5006:03 Aquaculture: Principles & Practices	1

MB5003:03 Fisheries Science	1
MB5620:03 Grand Challenges in Fisheries	1
MB5610:03 Fishing Gear and Technologies	2
MB5014:03 Aquaculture Stock Improvement	10
AQ5004:03 Aquaculture Stock Improvement	10
<i>Foundations in Biology & Ecology</i>	
recommended for students with no undergraduate background in biology & evolutionary ecology	
BS5470:03 Evolution	1
MB5380:03 Invertebrate Biology	2
BS5460:03 Fundamentals of Ecology	2
SC5202:03 Quantitative Methods in Science	1