RECOMMENDED STUDY PLAN NAME ______ STUDENT NUMBER ____ DEGREE Master of Science MAJOR _Environmental Management (ENM)

Course information – Master of Science

The Master of Science degree is structured such that students take sets of (1) foundational 'knowledge' specific to their major, (2) technical and / or analytical 'skills' subjects, and (3) 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.

Click here to see the relevant JCU Course handbook: https://www.jcu.edu.au/course-and-subject-handbook/courses/postgraduate-courses/master-of-science

Students wishing to take a semester long internship or research project need to transfer to the <u>MSc</u> <u>Professional</u> degree. This should be done before you start your JCU course.

Environmental Management major structure

- 1. Take the 4 following prescribed **Knowledge** subjects:
 - 1.1. EV5107 International Environmental Policy and Governance (SP3)
 - 1.2. EV5020 Human Dimensions of Nature, Environment and Conservation (SP1)
 - 1.3. <u>EV5701</u> Managing Coastal and Marine Environments (SP1) or EV5200 Natural Resource Management (SP2)
 - 1.4. EV5209 Principles and Practices of Protected Area Management (SP3)
- 2. Take 4 **Skills** subjects:
 - 2.1. EV5110 Environmental and Social Impact Assessment (SP2) obligatory; plus:
 - 2.2. Take 1 of the following Advanced Skill subjects from List 1:
 - 2.2.1.BS5260 Modelling Ecological Dynamics (SP2)
 - 2.2.2.BZ5450 Ecological and Conservation Genetics (SP2)
 - 2.2.3.EV5502 Advanced Geographic Information Systems (SP11)
 - 2.2.4.EV5506 Remote Sensing (SP9 / SP11)
 - 2.2.5. MB5300 Sampling and Experimental Design **OR** SC5502 Design and Analyses in Ecological Studies (SP3)
 - 2.3. And take 2 Additional Skills subjects from List 2.
 - 2.3.1. SC5200 Professional Employability (SP1 and SP2)

 SC5200 is recommended for all students in their first semester of study & compulsory if you are planning on taking the internship program (SC5009) in the MSc Professional degree.
- 3. Take 4 **Elective** subjects from <u>List 3</u>.

Full subject descriptions and timings of all subjects can be found online using the <u>Subject Search</u> tool. Use this tool 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 a student can take EV5209 in SP3 followed by EV5107.

Please note that timings of some subjects occasionally change among years, due to JCU's operational requirements. 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 <u>Subject</u> <u>Search</u>. Additional fees apply to cover trip transport, accommodation and food expenses for these field trips.

List 1. Advanced Skill Subjects (Select 1)

SP3	SP1	SP6 / SP7	SP2	SP9 Sept to Dec
Jan – Feb	Feb - June	June - July	July - Nov	SP10 / 11 Nov - Dec
MB5300:03 Sampling and Experimental Design ¹			BZ5450:03 Ecological and Conservation Genetics	EV5502:03 Advanced Geographic Information Systems - TSV
SC5502:03 Design and Analyses in Ecological Studies			EV5110:03 Environmental and Social Impact Assessment	EV5506:03 Remote Sensing -CNS LTD (SP9: Sept to Nov)
			BS5260:03 Modelling Ecological Dynamics	

¹ MB5300 and SC5502 are merged subjects in 2021. Students should have prior understanding of statistics, equivalent to SC5202.

List 2. Additional Skill Subjects (Select 2)

SP3	SP1	SP6 / SP7	SP2	SP9 Sept to Dec
Jan – Feb	Feb - June	June - July	July - Nov	SP10 / 11 Nov - Dec
SC5502:03 Design and Analyses in Ecological Studies ¹	SC5200:03 Professional Employability	BZ5990:03 Toolkit for the Field Biologist (Terrestrial studies)	SC5200:03 Professional Employability	AQ5004:03 Aquaculture: Stock Improvement
	SC5202:03 Quantitative Methods in Science	EA5018:03 Field Studies in Tropical Land and Water Science	BZ5450:03 Ecological and Conservation Genetics	EV5502:03 Advanced Geographic Information Systems - TSV
		EA5330:03 Field Techniques (earth sciences)	CH5203:03 Analytical Chemistry (Advanced)	EV5506:03 Remote Sensing - CNS (SP9 start)
		EA5044:03 Geological Mapping	EV5110:03 Environmental and Social Impact Assessment	EA5640:03 Advanced Marine Geoscience Technologies and Applications
			EV5505:03 Introduction to Geographic Information Systems	
			MA5405:03 Data Mining	
			BC5203:03 Advanced Bioinformatics	
			BS5260:03 Modelling Ecological Dynamics	

¹ MB5300 and SC5502 are merged subjects in 2021. Students should have prior understanding of statistics, equivalent to SC5202.

List 3. 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 <u>Subject Search</u> to review the units and check the study period they are offered in.

Recommended elective subjects for ENVIRONMENTAL MANAGEMENT. These are our recommended and most popular units grouped by particular career pathways and/or study interests.

TOPIC	STUDY PERIOD
Marine and Coastal Resource Management	
MB5310:03 Marine Reserves as Fisheries Management Tools	3
AQ5015:03 Sustainable Aquaculture	3
MB5003:03 Fisheries science	1
EV5406:03 Coral Reef Geomorphology	1
AQ5006:03 Aquaculture: Principles and Practices	1
EV5701:03 Managing Coastal & Marine Environments	1
MB5204:03 Conserving Marine Wildlife: Sea Mammals, Birds and	1
Reptiles	

MB5260:03 Grand Challenges in Fisheries	1
MB5004:03 Marine Conservation Biology	2
MB5270:03 Coastal, Estuarine and Mangrove Ecosystems	2
MB5190:03 Coral Reef Ecology	2
EV5401:03 Coastal and Catchment Geomorphology	2
MB5610:03 Fishing Gear and Technologies	2
MB5014:03 Managing Tropical Fisheries	11
MB5001:03 Tropical Marine Ecology and Coastal Impacts	11
Terrestrial Resource Management	
BZ5740:03 Wildlife Ecology and Management	1
EV5015:03 Sustainability in Practice	1
BZ5215:03 Conservation Biology	1
EV5200:03 Natural Resource Management	1
BZ5755:03 Biodiversity and Climate Change: Impact, Mitigation	7
and Adaptation	
BZ5620:03 Tropical Flora of Australia (Cairns)	7
BS5460:03 Fundamentals of Ecology	2
EA5017:03 Soil Properties and Processes	2
Interdisciplinary Study	
EV5015:03 Sustainability in Practice	1
EC5218:03 Economics and Sustainable Resource Management	1
LA2902:03 Environmental Law and Policy	1
AN5006:03 Asia Pacific Development: Culture and Globalisation	2
EV5003:03 Environmental Economics	2
EV5404:03 Field Studies in Tropical Geography	11
Only taught in even-numbered years.	
Other	
SC5901:03 Special Topic *	any
Do a mini project with a research supervisor (130 hours)	
SC5008:03 Professional Placement*	any
Do a 130 hour work placement	

^{*}enrolment is contingent upon project supervisor's approval

YOUR STUDY PLANNER

Fill in the cells below with your planned subjects. You can re-arrange when you take your skill and elective subjects contingent 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 SP1 or SP2, but can on request start in SP3 or SP7.

		er 6 month Teaching Period	TEACHING DEDICE 2 (TD2 : 1 D	
TEACHING PERIOD 1 (TP1 Jan – June)		TEACHING PERIOD 2 (TP2 July – December)		
SP3	SP1	SP6 / SP7	SP2	SP9 Sept to Dec
Jan – Feb	Feb - June	June - July	July - Nov	SP10 / 11 Nov - Dec
Major Core: EV5107 International Environmental Policy and Governance	Major Core: EV5020 Human Dimensions of Nature, Environment and Conservation		Skill Core: EV5110 Environmental and Social Impact Assessment	Advanced Skill subject
Major Core: EV5209 Principles and Practices of Protected Area Management (or SP7)	Major Core: EV5701 Managing Coastal and Marine Environments		Skill Subject SC5200:03 Professional Employability recommended ^a	
			Elective or Skill Subject	

Notes: Pink are core knowledge subjects, Grey are skills subjects, White are electives. Skill & elective timings are suggestions. a SC5200 unit is recommended for all students and should be taken in the first study period of your degree. It is offered in both SP1 and SP2.

TEACHING PERIOD 1	(TP1 Jan – June)		TEACHING PERIOD 2	(TP2 July – December)
SP3	SP1	SP6 / SP7	SP2	SP9 Sept to Dec
Jan – Feb	Feb - June	June - July	July - Nov	SP10 / 11 Nov - Dec
Core units or Skills or Elective	Elective			
	Elective			
	Elective			