RECOMMENDED STUDY PLAN

2021-2022

NAME ______STUDENT NUMBER _____
DEGREE Master of Science-Professional MAJOR Environmental Management (ENM)

Course information – Master of Science (Professional)

The Master of Science (Professional) degree is structured such that students take sets of (1) foundational 'knowledge' specific to their major, (2) technical and / or analytical 'skills' subjects, (3) elective subjects and (4) a capstone professional practice module in their final semester. The capstone module is either a research project or an industry internship.

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-professional.

Environmental Management major structure

- 1. Take the following 4 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. Take 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. <u>BZ5450</u> Ecological and Conservation Genetics (SP2)
 - 2.2.3. EV5502 Advanced Geographic Information Systems (SP11)
 - 2.2.4. <u>EV5506</u> Remote Sensing (SP9 / SP11)
 - 2.2.5. <u>MB5300</u> Sampling and Experimental Design **OR** <u>SC5502</u>:03 Design and Analyses in Ecological Studies (SP3)
 - 2.3. Take 2 Additional Skill 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 it you are taking the internship program (SC5009) in item 4 below.
- 3. Take 4 **Elective** subjects from <u>List 3</u>.
- 4. Take a 12 credit point Professional Practice Option
 - 4.1. Option 1 Research Project (two parts: SC5912 & SC5913) OR
 - 4.2. Option 2 Professional Employability (SC5009 Postgraduate Internship)

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

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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	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	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	

Professional Practice

Select one of the following options:

Option 1 - Research Project

• Take <u>SC5912:06</u> Research Project (Part 1 of 2) & <u>SC5913:06</u> (Part 2 of 2)

You can take the research project all in your final semester, or spread it over 2 semesters. Enrolment is conditional on attaining a minimum GPA of 5.5 from the preceding coursework units, and having a research project + supervisor confirmed.

Taking this research project is a pathway into a PhD program. More information about PhD pathways can be found here.

Option 2 - Professional Employability

• Take SC5009:12 Postgraduate Internship

This unit is to be taken in your final semester of study. Students must have completed the pre-requisite subject SC5200:03 Professional Employability. This pre-requisite unit should be taken in your first semester of study (in Year 1) and is recommended for both research and internship track students.

If you are seeking to gain employment in your field directly after the Master degree, then you should take the Professional Employability Option.

Detailed information about the Professional Practice options is provided to students during their first year of study and available on the LearnJCU course page (Organisations & Communities tab).

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 <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 Reptiles	1
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 and	7
Adaptation	
BZ5620:03 Tropical Flora of Australia (Cairns)	7
BS5460:03 Fundamentals of Ecology	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.	

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.

Year 1 Take 8 subjects (24 o	credit points) with 4 subje	ects per 6 month Teaching	; Period		
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:	Major Core:		Skill Core:	Advanced Skill subject	
EV5107 International	EV5020 Human		EV5110 Environmental and Social		
Environmental Policy and	Dimensions of Nature,		Impact Assessment		
Governance	Environment and				
	Conservation				
Major Core:	Major Core:		Skill Subject		
EV5209 Principles and	EV5701 Managing		SC5200 Professional Employability		
Practices of Protected Area	Coastal and Marine		recommended ^a		
Management (or SP7)	Environments (SP1)				
			Elective or Skill Subject		

Notes: Pink are core knowledge subjects, Grey are skills subjects, White are electives, Blue are professional practice. 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		Professional Practice (12cp)	
Elective			Pre-requisite conditions apply to both	
			streams	
			RESEARCH PROJECT (SC5912+SC5913)	
	Elective		OR	
	Licetive		POSTGRADUATE INTERNSHIP	
			(SC5009)	
			Pre-requisite unit SC5200	
	Elective			
			This module should be the final subject of	
			your degree.	