RECOMMENDED STUDY PLAN

2021-2022

NAME

STUDENT NUMBER

DEGREE Master of Science

MAJOR <u>Geology (MSC-GEL)</u>

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 <u>here</u>. When you are ready to enrol in subjects proceed to your eStudent account.

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

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.

Geology major structure

- 1. Take the following 4 prescribed **Knowledge** subjects:
 - 1.1. EA5048 Minerals and Magmas (SP1)
 - 1.2. EA5320 Earth Resources, Exploration and Environment (SP1)
 - 1.3. EA5650 Sedimentary Environments and Energy Resources (SP2)
 - 1.4. EA5211 Structural Geology and Tectonics (SP1)
- 2. Take 4 Skills subjects:
 - 2.1. EA5044 Geological Mapping (SP6) (obligatory); Plus:
 - 2.2. **One** of the following **advanced skill** subjects from <u>List 1</u> below:
 - 2.2.1. EV5110 Environmental and Social Impact Assessment (SP2)
 - 2.2.2. EV5502 Advanced Geographic Information Systems (SP11)
 - 2.2.3. <u>EV5506</u> Remote Sensing (SP9 / SP11)
 - 2.2.4. <u>BS5260</u> Modelling Ecological Dynamics (SP2)
 - 2.2.5. <u>BZ5450</u> Ecological and Conservation Genetics (SP2)
 - 2.2.6. <u>SC5502</u> Design and Analyses in Ecological Studies (SP3)
 - 2.3. *Two* subjects from the additional skill subjects in <u>List 2</u> below.
 - 2.3.1. Of these <u>SC5200</u> Professional Employability (SP1 and SP2) is recommended for all students in their first semester of study & is mandatory if you will be taking SC5009 (Postgraduate Internship) in the MSc Professional.
- 3. Take 4 Elective subjects from List 3 below.

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 <u>here</u>.

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 both EV5502 and EA5640 in SP11.

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.

SP3	SP1	SP7	SP2	SP9 Sept to Dec
Jan – Feb	Feb - June	June - July	July - Nov	SP10 / 11 Nov - Dec
		BS5260:03 Modelling Ecological Dynamics	<u>BZ5450</u> :03 Ecological and Conservation Genetics	<u>EV5502</u> :03 Advanced Geographic Information Systems - TSV
			EV5110:03 Environmental and Social Impact Assessment	EV5506:03 Remote Sensing -CNS LTD (SP9: Sept to Nov)

List 1. Advanced Skill Subjects (Select 1)

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
MB5300:03 Sampling and Experimental Design ¹	SC5200:03 Professional Employability	EA5330:03 Field Techniques	<u>SC5200</u> :03 Professional Employability	AQ5004:03 Aquaculture: Stock Improvement
SC5502:03 Design and Analyses in Ecological Studies	SC5202:03 Quantitative Methods in Science	EA5044:03 Geological Mapping	<u>BZ5450</u> :03 Ecological and Conservation Genetics	<u>EV5502</u> :03 Advanced Geographic Information Systems - TSV
	<u>EV5020</u> :03 Human Dimensions of Nature, Environment and Conservation	<u>BZ5990</u> :03 Toolkit for the Field Biologist <i>(Terrestrial studies)</i>	<u>CH5203</u> :03 Analytical Chemistry (Advanced)	<u>EV5506</u> :03 Remote Sensing - CNS (SP9 start)
			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 the GEOLOGY Major - These are our recommended and most popular units in your major.

Subject	Study Period
SC5502 Design & Analysis in Ecological Studies	3
CH5041:03 Environmental Chemistry	1
EA5090:03 Applied Hydrology (CNS only)	1
EA5320:03 Earth Resources, Exploration and Environment	1
EV5015:03 Sustainability in Practice	1
EV5406:03 Coral Reef Geomorphology	1
EA5046:03 Earth and Environmental Geochemistry	2
EA5340:03 Disturbed Site Repair	2
EA5650:03 Sedimentary Environments and Energy Resources	2
EV5401:03 Coastal and Catchment Geomorphology	2
EV5454:03 Natural Hazards	2
EA5640:03 Advanced Marine Geoscience Technologies and Applications	11
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.

Year 1 Take 8	3 subjects (24 credit points) with 4	subjects per 6 month Te	eaching Period	
TEACHING PERI	OD 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: EA5048 Minerals and Magmas	Major Skill Core: EA5044 Geological Mapping	Major core: <u>EA5650</u> Sedimentary Environments and Energy Resources	Skill Subject
	Major Core: EA5320 Earth Resources, Exploration and Environment		Advanced Skill Subject	
	Major Core: <u>EA5211</u> Structural Geology and Tectonics		Skill Subject	
	Skill subject SC5200 Professional Employability recommended.			-

Notes: Pink are core knowledge subjects, Grey are skills subjects, White are electives. Elective timings are suggestions only.

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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			

Notes: Timing of Electives are suggestion only