DEGREE PROGRAM Master of Science **MAJOR** Geology (MSC-GEL)

RECOMMENDED STUDY PLAN 2020-2021

NAME _____ **STUDENT NUMBER** _____

DEGREE PROGRAM Master of Science **MAJOR** Geology (MSC-GEL)

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.

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

Geology major structure:

1. Take 4 prescribed '*knowledge*' subjects
   - 1.1. EA5048:03 Minerals and Magmas
   - 1.2. EA5320:03 Earth Resources, Exploration and Environment
   - 1.3. EA5650:03 Sedimentary Environments and Energy Resources
   - 1.4. EA5211:03 Structural Geology and Tectonics

2. Take 4 '*skills*' subjects for your major
   - 2.1. EA5044:03 Geological Mapping
   - 2.2. Plus 1 of the following *advanced skills* subject
     - 2.2.1. BS5260:03 Modelling Ecological Dynamics ***or***
     - 2.2.2. BZ5450:03 Ecological and Conservation Genetics ***or***
     - 2.2.3. EV5110:03 Environmental and Social Impact Assessment ***or***
     - 2.2.4. EV5502:03 Advanced Geographic Information Systems ***or***
     - 2.2.5. EV5506:03 Remote Sensing
     - 2.2.6. MB5300:03 Sampling and Experimental Design ***or*** [1]
     - 2.2.7. SC5502:03 Design and Analyses in Ecological Studies
   - 2.3. Plus 2 subjects from **List 1**
3. Take 4 *elective* subjects (see recommended electives list)

Full subject descriptions and timings of all subjects can be found online using the Subject Search tool. 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. For example, EV5502 assumes you have already taken EV5505 or an equivalent at JCU or at your previous university.

[1] Not offered in 2020. Merged with SC5502.

Research Projects and Placement subjects. Students wishing to take a 12 credit point independent research project or professional placement need to transfer into the Master of Science (Professional) program to complete these.

RECOMMENDED STUDY PLAN

Colour legend: Pink are core 'major or knowledge' subjects, Grey are skills subjects, White are electives.

Level 5: Year 1 (take 8 subjects / 24 credit points)

SP3	SP1	SP6/7	SP2	SP9/10/11
	Major Core: EA5048:03 Minerals and Magmas	**Major Skill Core:** EA5044:03 Geological Mapping	**Major core:** EA5650:03 Sedimentary Environments and Energy Resources	**Skill Subject**
	EA5320:03 Earth Resources, Exploration and Environment		**Advanced Skill Subject**	
	EA5211:03 Structural Geology and Tectonics		**Skill Subject**	

Notes:
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.

Level 5: Year 2 (take 12 credit points)

SP3	SP1	SP6/7	SP2	SP10/SP11
Elective	**Elective**			
	Elective			
	Elective			

Skill Subjects:

In addition to the **Major Core Skill Subject** (EA5044), choose 1 advanced skill subject 2 subjects from **List 1**. You must meet the Assumed Knowledge or Prerequisites for any subject selected.

Advanced Skill Subjects (Select 1)

SP1	SP2	SP9/SP10/SP11
BS5260:03 Modelling Ecological Dynamics	BZ5450:03 Ecological and Conservation Genetics	EV5502:03 Advanced Geographic Information Systems - TSV TSV
	EV5110:03 Environmental and Social Impact Assessment	EV5506:03 Remote Sensing -CNS LTD (SP9)

List 1 – Additional Skill Subjects (Select 2)

SP3	SP1	SP6/7	SP2	SP9/SP10/SP11
SC5502:03 Design and Analyses in Ecological Studies TSV	SC5202:03 Quantitative Methods in Science	EA5018:03 Field Studies in Tropical Land and Water Science	BC5203:03 Advanced Bioinformatics	AQ5004:03 Aquaculture: Stock Improvement
MB5300:03 Sampling and Experimental Design [2]	BS5260:03 Modelling Ecological Dynamics	EA5330:03 Field Techniques (geology)	BZ5450:03 Ecological and Conservation Genetics	EV5502:03 Advanced Geographic Information Systems - TSV
	EV5020:03 Human Dimensions of Nature, Environment and Conservation	SC5232:03 Marine Sensor Technologies and Applications [3]	CH5203:03 Analytical Chemistry (Advanced)	EV5506:03 Remote Sensing -CNS LTD (SP9)
		BZ5990:03 Toolkit for the Field Biologist	EV5110:03 Environmental and Social Impact Assessment	EA5640:03 Advanced Marine Geoscience Technologies and Applications
		EA5044:03 Geological Mapping	EV5505:03 Introduction to Geographic Information Systems	
			MA5405:03 Data Mining	
			SC5202:03 Quantitative Methods in Science (mixed mode)	

[2] Merged with SC5502 for 2020. SC5202 is a required unit if you have not already completed a statistics subject at university

[3] Not yet available

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

Recommended elective subjects for the GEOLOGY Major - These are our recommended elective subject sets for specific career pathways and/or study interests

TOPIC	STUDY PERIOD
EA5016 Hydrology	1
EA5340 Disturbed Site Repair	2
EA5404 From Icehouse to Greenhouse	2
EA5043 Ore Genesis	2
EA5046 Earth and Environmental Geochemistry	2
EA5024 Business and Financial Management in the Minerals Industry *Note-Offered in even-numbered years.*	3
EA5029 Integrated Spatial Analysis and Remote Sensing of Mineral Exploration Targets *Note-Offered in even-numbered years.*	3
EA5640 Advanced Marine Geoscience Technologies and Applications	11