

RECOMMENDED STUDY PLAN

2022

DEGREE Master of Science

MAJOR Geology (GEL)

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.

Geology major structure

1. Take the following 4 **Knowledge** subjects:
 - 1.1. [EA5048](#) Minerals and Magmas (SP1)
 - 1.2. [EA5211](#) Structural Geology and Tectonics (SP1)
 - 1.3. [EA5320](#) Earth Resources, Exploration and Environment (SP1)
 - 1.4. [EA5650](#) Sedimentary Environments and Energy Resources (SP2)

2. Take these **Skills** subjects:
 - 2.1. [SC5200](#) Professional Employability (SP1 OR SP2)AND
 - 2.2. [EA5044](#) Geological Mapping* (SP6) **OR** [EA5046](#) Earth and Environmental Geochemistry (SP2)
If you take EA5044 you also need to take EA5045 as a co-requisite subject*AND take 1 additional skill subject from **List 1.
 - For your major we recommend [EA5330](#) Field Techniques **OR** [EA5044](#) Geological Mapping **OR** [EV5505](#) Introduction to GIS **OR** [EV5506](#) Remote Sensing.

3. Take 4 **Elective** subjects
See recommendations for your major 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)	Study Period 2 (Jul-Nov)	SP 9 (Sept-Nov) SP 10 (Nov-Jan) SP 11 (Nov-Feb)
	Major Core: <u>EA5048</u> Minerals and Magmas	Major Core: <u>EA5044</u> Geological Mapping	Major Core: <u>EA5650</u> Sedimentary Environments and Energy Resources OR <u>EA5046</u> Earth and Environmental Geochemistry	
	Major Core: <u>EA5320</u> Earth Resources, Exploration and Environment	Major Core Option: <u>EA5045</u> Field Techniques in Geology - <i>RECOMMENDED</i>	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>EA5211</u> Structural Geology and Tectonics	
	Major Core: <u>SC5200</u> Professional Employability – available SP1 & SP2	
	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>EA5650</u> Sedimentary Environments and Energy Resources OR <u>EA5046</u> Earth and Environmental Geochemistry	
Major Core: <u>SC5200</u> Professional Employability – available SP1 & SP2	
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>EA5048</u> Minerals and Magmas	Major Core: <u>EA5044</u> Geological Mapping	Skill or Elective	
	Major Core: <u>EA5320</u> Earth Resources, Exploration and Environment	Major Core Option: <u>EA5045</u> Field Techniques in Geology - <i>RECOMMENDED</i>	Skill or Elective	
	Major Core: <u>EA5211</u> Structural Geology and Tectonics		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 GEOLOGY Major - These are our recommended and most popular units in your major.

Subject	Study Period	Campus
CH5041:03 Environmental Chemistry	1	Cairns & Townsville
EA5016:03 Hydrology	1	Cairns & Townsville
EA5017:03 Soil Properties and Processes	2	Cairns & Townsville
EA5043:03 Ore Genesis	1	Townsville
EA5044:03 Field Techniques (co-req EA5045)	6	Townsville
EA5045:03 Field Techniques in Geology (co-req EA5044)	7	Townsville
EA5090:03 Applied Hydrology	1	Cairns
EA5320:03 Earth Resources, Exploration and Environment	1	Townsville
EV5015:03 Sustainability in Practice	1	Cairns & Townsville
EV5406:03 Coral Reef Geomorphology	1	Townsville
EA5048:03 Minerals and Magmas	1	Townsville
EA5211:03 Structural Geology and Tectonics	1	Cairns & Townsville
EA5404:03 From Icehouse to Greenhouse	2	Cairns & Townsville
EV5200:03 Natural Resource Management	2	Townsville
EA5046:03 Earth and Environmental Geochemistry	2	Cairns & Townsville
EA5650:03 Sedimentary Environments and Energy Resources	2	Townsville
EA5120:03 The Fossil Record: Dinosaurs and Vertebrates Through Time	2	Townsville
EA5650:03 Sedimentary Environments and Energy Resources	2	Townsville
EV5401:03 Coastal and Catchment Geomorphology	2	Cairns & Townsville
EV5454:03 Natural Hazards	2	Cairns & Townsville
EA5640:03 Advanced Marine Geoscience Technologies and Applications	11	Townsville
EV5404:03 Field Studies in Tropical Geography <i>Only taught in even-numbered years.</i>	11	Townsville