

RECOMMENDED STUDY PLAN**2021-2022**

NAME _____ STUDENT NUMBER _____

DEGREE Graduate Diploma of Science STREAM Aquaculture Science & Technology (AQS)

Course information – Graduate Diploma of Science

This 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 stream in the program 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/graduate-diploma-of-science>

Students wishing to take a semester long internship or research project need to transfer to the [MSc Professional](#) degree. This should be done before you start your JCU course. The following study plan is mirrored to the MSc Professional structure as a pathway towards completing that degree.

Aquaculture, Science & Technology major structure

1. Take 2 of the following **Knowledge** subjects:
 - 1.1. [AQ5015](#) Sustainable Aquaculture (SP3)
 - 1.2. [AQ5002](#) Aquaculture: Feeds and Nutrition (SP1)
 - 1.3. [AQ5006](#) Aquaculture: Principles and Practice (SP1)
 - 1.4. [AQ5003](#) Aquaculture: Propagation (SP7)
2. Take 3 **Skills** subjects:
 - 2.1. Take [AQ5012](#):06 Aquaculture: Hatchery Techniques (SP1) **obligatory; plus:**
 - 2.2. Take 1 Additional Skills subject from [List 1](#).
 - 2.2.1. [AQ5004](#) Aquaculture: Stock Improvement (SP10) OR
 - 2.2.2. [SC5200](#) Professional Employability (SP1 and SP2) is recommended for all & compulsory if you are taking the internship subject (SC5009) in the MSc Professional degree.
3. Take 3 **Elective** subjects from [List 2](#).

Full subject descriptions and timings of all subjects can be found online using the [Subject Search](#) 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 AQ5015 in SP3 followed by MB5310.

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 [Subject Search](#). Additional fees apply to cover trip transport, accommodation and food expenses for these field trips.

List 1. Additional Skill Subjects

SP3 Jan – Feb	SP1 Feb - June	SP6 / SP7 June - July	SP2 July - Nov	SP9 Sept to Dec SP10 / 11 Nov - Dec
SC5502 :03 Design and Analyses in Ecological Studies ¹	SC5200 :03 Professional Employability		SC5200 :03 Professional Employability	AQ5004 :03 Aquaculture: Stock Improvement
	SC5202 :03 Quantitative Methods in Science	BZ5990 :03 Toolkit for the Field Biologist (<i>Terrestrial studies</i>)	BZ5450 :03 Ecological and Conservation Genetics	EV5502 :03 Advanced Geographic Information Systems - TSV
	EV5020 :03 Human Dimensions of Nature, Environment and Conservation	EA5018 :03 Field Studies in Tropical Land and Water Science ²	BS5260 :03 Modelling Ecological Dynamics	EV5506 :03 Remote Sensing - CNS (SP9 start)
		EA5330 :03 Field Techniques ²	EV5110 :03 Environmental and Social Impact Assessment	EA5640 :03 Advanced Marine Geoscience Technologies and Applications
		EA5044 :03 Geological Mapping ²	EV5505 :03 Introduction to Geographic Information Systems	
			MA5405 :03 Data Mining	
			BC5203 :03 Advanced Bioinformatics	
			CH5203 :03 Analytical	

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

² Not intended for students in Marine Biology, Fisheries, Aquaculture or Tropical Biology & Conservation

			Chemistry (Advanced)	
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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 AQUACULTURE: These are our recommended and most popular units grouped by particular career pathways and/or study interests.

TOPIC	STUDY PERIOD
<i>Aquaculture specialisations:</i>	
AQ5008:03 Aquaculture: System Design	1
AQ5007:03 Aquatic Animal Ecophysiology	2
AQ5009:03 Aquaculture of Tropical Species	2
TV5240:03 Aquatic Pathobiology	2
MI5003:03 Diagnosis of Bacterial Diseases in Aquaculture	1
MI5031:03 Diagnosis of Viral Disease in Aquaculture	9
<i>Marine Science electives</i>	
MB5003:03 Fisheries Science	1
MB5400:03 Life History & Evolution of Reef Corals	1
MB5004:03 Marine Conservation Biology	2
MB5610:03 Fishing Gear & Technologies	2
MB5270:03 Coastal, Estuarine and Mangrove Ecosystems	2
MB5380:03 Invertebrate Biology	2
MB5204:03 Conserving Marine Wildlife: Sea Mammals, Birds and Reptiles	1
MB5260:03 Grand Challenges in Fisheries	1
<i>Environmental Science & Management electives</i>	
CH5041:03 Environmental Chemistry	1
EC5218:03 Economics and Sustainable Resource Management	1
EV5020:03 Human Dimensions of Nature, Environment and Conservation	1
MB5310:03 Marine Reserves as Fisheries Management Tools	3
EV5107:03 International Environmental Policy and Governance	3
MB5014:03 Managing Tropical Fisheries	11

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 credit points) with 4 subjects per 6 month Teaching Period				
TEACHING PERIOD 1 (TP1 Jan – June)			TEACHING PERIOD 2 (TP2 July – December)	
SP3 Jan – Feb	SP1 Feb - June	SP6 / SP7 June - July	SP2 July - Nov	SP9 Sept to Dec SP10 / 11 Nov - Dec
	Core: AQ5002 :03 Aquaculture: Feeds and Nutrition	Core: AQ5003 :03 Aquaculture: Propagation	Elective	Skill subject: AQ5004 :03 Aquaculture: Stock Improvement <i>recommended</i>
	Core: AQ5006 :03 Aquaculture: Principles and Practice		Elective	
	Core Skill subject: AQ5012 :06 Aquaculture: Hatchery Techniques		Elective OR Skill subject: SC5200 :03 Professional Employability ^b <i>recommended.</i>	

Notes: Pink are core knowledge subjects, Grey are skills subjects, White are electives. Timings of electives and skills subjects are suggestions.