

RECOMMENDED STUDY PLAN

2022

DEGREE [Graduate Diploma of Science](#)

STREAM [Aquaculture, Science & Technology \(AQS\)](#)

NAME _____

STUDENT NUMBER _____

Course information – Graduate Diploma of Science

This degree is structured such that students take sets of foundational '*knowledge*' specific subjects to their major, technical and / or analytical '*skills*' subjects, and *elective* subjects. Additionally all students take the core subject [SC5200](#) Professional Employability.

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.

For more information relevant to the degree see the JCU Course handbook for the [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 Stream (1) structure

1. Take 2 of the following **Knowledge** subjects:
 - 1.1. [AQ5002](#) Feeds and Nutrition (SP1)
 - 1.2. [AQ5003](#) Aquaculture: Propagation (SP7)
 - 1.3. [AQ5006](#) Aquaculture: Principles and Practices (SP1)
 - 1.4. [AQ5015](#) Sustainable Aquaculture (SP3)
2. Take these **Skills** subjects:
 - 2.1. [SC5200](#) Professional Employability (SP1 OR SP2)
AND
 - 2.2. [AQ5012:06](#) Hatchery Techniques (SP1)
3. Take 3 **Elective** subjects
See recommendations for your major below.

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. 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.

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.

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.

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.

Teaching Period 1 (January – June)		Teaching Period 2 (July – December)		
Study Period 3 (Feb-Jun)	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)
Stream Option:	Degree Core: <u>SC5200</u> Professional Employability – available SP1 & SP2		Elective:	
	Stream Core: <u>AQ5012</u> Hatchery Techniques		Elective:	
	Stream Option:		Elective:	

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

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)
Stream Option:	
Elective:	
Elective:	

Year 2: Take 12 credit points in teaching period 1.

Teaching Period 1 (January – June)		
SP 3 (Feb-Jun)	Study Period 1 (Feb-Jun)	SP 6 (May-Jul) SP 7 (Jun-Jul)
Stream Option:	Degree Core: <u>SC5200</u> Professional Employability – available SP1 & SP2	
	Stream Core: <u>AQ5012</u> Hatchery Techniques	
	Elective:	

List 1. Skill Subjects

Subjects are available at both Townsville (TSV) and / or Cairns (CNS) campus as noted. Most of these subjects have pre-requisite or co-requisite subjects.

Make sure you check and have fulfilled that requirement.

SP3 Jan – Feb	SP1 Feb - June	SP6 / SP7 June - July	SP2 July - Nov	SP9 Sept to Dec SP10 / 11 Nov - Dec
EV5020:03 Human Dimensions of Nature, Environment and Conservation – CNS & TSV	SC5202:03 Quantitative Methods in Science – CNS & TSV	EA5330:03 Field Techniques – TSV <i>(For geology and earth sciences)</i>	BC5203:03 Advanced Bioinformatics - TSV	AQ5004:03 Aquaculture: Stock Improvement - TSV
	BS5260:03 Modelling Ecological Dynamics – CNS & TSV	EA5044:03 Geological Mapping – TSV <i>(co-req EA5045)</i>	BZ5450:03 Ecological and Conservation Genetics - TSV	EV5502:03 Advanced Geographic Information Systems – TSV
		BZ5990:03 Toolkit for the Field Biologist - CNS & TSV <i>(for terrestrial students)</i>	CH5203:03 Analytical Chemistry (Advanced) – TSV	EV5506:03 Remote Sensing - CNS <i>(September start)</i>
		EA5018:03 Field Studies in Tropical Land and Water Science - CNS	EV5110:03 Environmental and Social Impact Assessment - CNS & TSV	EA5640:03 Advanced Marine Geoscience Technologies and Applications - TSV
			EV5505:03 Introduction to Geographic Information Systems - CNS & TSV	
			MA5405:03 Data Mining - TSV	

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.

TOPIC	STUDY PERIOD
<i>Aquaculture electives:</i>	
AQ5008:03 Aquaculture: System Design	1
AQ5007:03 Aquatic Animal Ecophysiology	2
AQ5009:03 Aquaculture of Tropical Species	2
TV5240:03 Aquaculture Health	2
MI5003:03 Diagnosis of Bacterial Diseases in Aquaculture	1
MI5031:03 Diagnosis of Viral Disease in Aquaculture	2
<i>Marine Science electives</i>	
MB5003:03 Fisheries Science	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	Trimester 1
EV5020:03 Human Dimensions of Nature, Environment and Conservation	1
MB5310:03 Marine Reserves as Fisheries Management Tools	3
EV5003:03 Environmental Economics	
MB5014:03 Managing Tropical Fisheries	11