RECOMMENDED STUDY PLAN   2022

DEGREE Master of Science (Prof) MAJOR Aquaculture, Science &Technology (AQS)

NAME _____   STUDENT NUMBER _____

Course information – Master of Science (Professional)

The Master of Science (Professional) degree is structured such that students take sets of foundational '*knowledge*' specific to their major, technical and / or analytical '*skills*' subjects, *elective* subjects and a capstone professional practice module in their final semester. The capstone module is either a research project or an industry internship.

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 (Professional)

Aquaculture, Science & Technology major structure

1. Take the following 4 **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 these **Skills** subjects:
    2.1. SC5200 Professional Employability (SP1 OR SP2)
          AND
    2.2. AQ5012 (6CP) Aquaculture: Hatchery Techniques (SP1)

    AND take 1 additional skill subject from **List 1**
    -   *For your major we recommend SC5202 Quantitative Methods in Science OR AQ5004 Aquaculture: Stock Improvement.*

3. Take 4 **Elective** subjects
    See recommendations for your major below.

4. Take a 12 credit point **Professional Practice** option to complete your degree
        Option 1 – Research Project (two parts: take SC9512 & SC5913) *OR*
        Option 2 – Internship (SC5009 Postgraduate Internship)

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: AQ5002 Aquaculture: Feeds and Nutrition	**Major Core:** AQ5003 Aquaculture: Propagation	**Major Core:** SC5200 Professional Employability – available SP1 & SP2	
	Major Core: AQ5006 Aquaculture: Principles and Practices		**Skill** or **Elective**	
	Skill or **Elective**		**Skill** or **Elective**	
			Skill or **Elective**	

Year 2   Take 24 credit points, with 12 credit points per 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: AQ5015 Sustainable Aquaculture	**Major Core:** AQ5012 Aquaculture: Hatchery Techniques		**Option 1 - Research Stream** SC5912 Research Project (Part 1 of 2) SC5913 Research Project (Part 2 of 2) OR **Option 2 – Professional Employability Stream** SC5009 Postgraduate Internship	
	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: SC5200 Professional Employability – available SP1 & SP2	**Skill** or **Elective**
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: AQ5015 Sustainable Aquaculture	**Major Core:** AQ5002 Aquaculture: Feeds and Nutrition	**Major Core:** AQ5003 Aquaculture: Propagation	**Skill** or **Elective**	
	Major Core: AQ5006 Aquaculture: Principles and Practices		**Skill** or **Elective**	
	Major Core: AQ5012 Aquaculture: Hatchery Techniques			

Year 2: Take 12 credit points in Teaching Period 1

Teaching Period 1 (January-Jun)	
SP 3 (Jan-Feb)	**Study Period 1** (Feb-May)
	Option 1 - Research Stream SC5912 Research Project (Part 1 of 2) SC5913 Research Project (Part 2 of 2) OR **Option 2 – Professional Employability Stream** SC5009 Postgraduate Internship

List 1. 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)
EV5020 Human Dimensions of Nature, Environment and Conservation	BS5260 Modelling Ecological Dynamics	**SP6** EA5018 Field Studies in Tropical Land and Water Science	BC5203 Advanced Bioinformatics	**SP10** AQ5004 Aquaculture: Stock Improvement
	SC5202 Quantitative Methods in Science	**SP6** EA5044 Geological Mapping	BZ5450 Ecological and Conservation Genetics	**SP9** EV5506 Remote Sensing
		SP7 BZ5990 Toolkit for the Field Biologist	CH5203 Analytical Chemistry (Advanced)	**SP11** EA5640 Advanced Marine Geoscience Technologies and Applications
		SP7 EA5330 Field Techniques	EV5110 Environmental and Social Impact Assessment	**SP11** EV5502 Advanced Geographic Information Systems
			EV5505 Introduction to Geographic Information Systems	
			MA5405 Data Mining	
			SC5502 Design and Analyses in Ecological Studies	

Professional Practice Options

Take one of the following:

Option 1 - Research Project
- Take SC5912:06 Research Project (Part 1 of 2) & SC5913:06 (Part 2 of 2)

You can take the research project all in your final semester, or spread it over 2 semesters. Enrolment is conditional on attaining a minimum GPA of 5.5 from the preceding coursework units, and having a research project + supervisor confirmed.

Taking this research project is a pathway into a PhD program. More information about PhD pathways can be found underlined.

Option 2 - Professional Employability
- Take SC5009:12 Postgraduate Internship

This unit is to be taken in your final semester of study.

If you are seeking to gain employment in your field directly after the Master degree, then you should take the Professional Employability option.

Detailed information about the Professional Practice options is provided to students during their first year of study and available on the LearnJCU course page (Organisations & Communities tab).

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 AQUACULTURE, SCIENCE & TECHNOLOGY Major - These are our recommended and most popular units in your major.

TOPIC	STUDY PERIOD
Aquaculture electives:	
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
Marine Science electives	
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
MB5620:03 Grand Challenges in Fisheries	1
Environmental Science & Management electives	
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	2
MB5014:03 Managing Tropical Fisheries	11