

RECOMMENDED STUDY PLAN

2022

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

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.

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.

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>AQ5002</u> Aquaculture: Feeds and Nutrition | Major Core: <u>AQ5003</u> Aquaculture: Propagation | Major Core: <u>SC5200</u> Professional Employability – available SP1 & SP2 | |
| | Major Core: <u>AQ5006</u> Aquaculture: Principles and Practices | | Skill or Elective | |
| | 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>AQ5015</u> Sustainable Aquaculture | Major Core: <u>AQ5012</u> Aquaculture: Hatchery Techniques | |
| | 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>SC5200</u> 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: <u>AQ5015</u> Sustainable Aquaculture | Major Core: <u>AQ5002</u> Aquaculture: Feeds and Nutrition | Major Core: <u>AQ5003</u> Aquaculture: Propagation | Skill or Elective | |
| | Major Core: <u>AQ5006</u> Aquaculture: Principles and Practices | | Skill or Elective | |
| | Major Core: <u>AQ5012</u> Aquaculture: Hatchery Techniques | | | |

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) |
|--|---|---|--|--|
| <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 | | | |

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 |
|---|--------------|
| <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 |