

## RECOMMENDED STUDY PLAN

2022

DEGREE Master of Science (Prof) MAJOR Fisheries Science and Management (FSM)

NAME \_\_\_\_\_ STUDENT NUMBER \_\_\_\_\_

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### 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 \(Professional\)](#)

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### *Fisheries Science & Management major structure*

1. Take the following 4 **Knowledge** subjects:
  - 1.1. [MB5003](#) Fisheries Science (SP1)
  - 1.2. [MB5610](#) Fishing Gear and Technologies (SP2) **OR** [MB5620](#) Grand Challenges in Fisheries (SP1)
  - 1.3. [MB5014](#) Managing Tropical Fisheries (SP11)
  - 1.4. [EV5020](#) Human Dimensions of Nature, Environment and Conservation (SP3)
  
2. Take these **Skills** subjects:
  - 2.1. [SC5200](#) Professional Employability (SP1 OR SP2)  
AND
  - 2.2. [SC5502](#) Design and Analyses in Ecological Studies (SP2)

AND take 1 of these advanced skill subjects (Major core option):

  - 2.3. [BS5260](#) Modelling Ecological Dynamics (SP1)
  - 2.4. [BZ5450](#) Ecological and Conservation Genetics (SP2)
  - 2.5. [EV5110](#) Environmental and Social Impact Assessment (SP2)
  - 2.6. [EV5502](#) Advanced Geographic Information Systems (SP11)
  - 2.7. [EV5506](#) Remote Sensing (SP9)

AND take 1 additional skill subject from [List 1](#)

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)
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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.

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## 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>MB5003</u> Fisheries Science		Major Core: <u>SC5502</u> Design and Analyses in Ecological Studies	Major Core: <u>MB5014</u> Managing Tropical Fisheries
	Major Core: <u>SC5200</u> Professional Employability – available SP1 & SP2		Major Core: <u>MB5610</u> Fishing Gear and Technologies <b>OR</b> <u>MB5620</u> Grand Challenges in Fisheries (SP1)	
	Skill or Elective		Major Core Option: Select 1 subject from the list above. Can take this subject anywhere within this year	
	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)	
<b>Study Period 3</b> (Jan-Feb)	<b>Study Period 1</b> (Feb-May)	<b>SP 6</b> (May-Jul) <b>SP 7</b> (Jun-Jul)	<b>Study Period 2</b> (Jul-Nov)	<b>SP 9</b> (Sept-Nov) <b>SP 10</b> (Nov-Jan) <b>SP 11</b> (Nov-Feb)
<b>Major Core: EV5020</b> Human Dimensions of Nature, Environment and Conservation	<b>Skill</b> or <b>Elective</b>		<b>Option 1 - Research Stream</b> SC5912 Research Project (Part 1 of 2) SC5913 Research Project (Part 2 of 2)  OR <b>Option 2 – Professional Employability Stream</b> SC5009 Postgraduate Internship	
	<b>Skill</b> or <b>Elective</b>			
	<b>Skill</b> or <b>Elective</b>			

**July start**

**Year 1:** Take 4 subjects (or 12 credit points) in teaching period 2.

<b>Teaching Period 2 (July-December)</b>	
<b>Study Period 2</b> (Jul-Nov)	<b>SP 9</b> (Sept-Nov) <b>SP 10</b> (Nov-Jan) <b>SP 11</b> (Nov-Feb)
<b>Major Core:</b> <u>SC5502</u> Design and Analyses in Ecological Studies	<b>Major Core:</b> <u>MB5014</u> Managing Tropical Fisheries
<b>Major Core:</b> <u>MB5610</u> Fishing Gear and Technologies <b>OR</b> <u>MB5620</u> Grand Challenges in Fisheries (SP1)	
<b>Major Core Option:</b> Select 1 subject from the list above. Can take this subject anywhere within this year	

**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>EV5020</u> Human Dimensions of Nature, Environment and Conservation	Major Core: <u>MB5003</u> Fisheries Science		Skill or Elective	
	Major Core: <u>SC5200</u> Professional Employability – available SP1 & SP2		Skill or Elective	
	Skill or Elective		Skill or Elective	
			Skill or Elective	

**Year 2:** Take 12 credit points in Teaching Period 1

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

**List 1. Additional Skill Subjects (Select 1)**

<b>Study Period 3</b> (Jan-Feb)	<b>Study Period 1</b> (Feb-Jun)	<b>Study Period 6</b> (May-Jul) <b>Study Period 7</b> (Jun-Jul)	<b>Study Period 2</b> (Jul-Nov)	<b>Study Period 9</b> (Sept-Nov) <b>Study Period 10</b> (Nov-Jan) <b>Study Period 11</b> (Nov-Feb)
<u>EV5020</u> Human Dimensions of Nature, Environment and Conservation	<u>BS5260</u> Modelling Ecological Dynamics	<b>SP6</b> <u>EA5018</u> Field Studies in Tropical Land and Water Science	<u>BC5203</u> Advanced Bioinformatics	<b>SP10</b> <u>AQ5004</u> Aquaculture: Stock Improvement
		<b>SP6</b> <u>EA5044</u> Geological Mapping	<u>BZ5450</u> Ecological and Conservation Genetics	<b>SP9</b> <u>EV5506</u> Remote Sensing
	<u>SC5202</u> Quantitative Methods in Science	<b>SP7</b> <u>BZ5990</u> Toolkit for the Field Biologist	<u>CH5203</u> Analytical Chemistry (Advanced)	<b>SP11</b> <u>EA5640</u> Advanced Marine Geoscience Technologies and Applications
		<b>SP7</b> <u>EA5330</u> Field Techniques	<u>EV5110</u> Environmental and Social Impact Assessment	<b>SP11</b> <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		

## 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 [here](#).

### Option 2 - Professional Employability

- Take [SC5009:12](#) Postgraduate Internship

This unit is to be taken in your final semester of study. Students must have completed the prerequisite subject [SC5200:03](#) *Professional Employability*.

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 FISHERIES, SCIENCE & MANAGEMENT Major** - These are our recommended and most popular units in your major.

TOPIC	STUDY PERIOD
<i>Fisheries Science (biology)</i>	
MB5055:03 Biological Oceanography	1
MB5620:03 Grand Challenges in Fisheries	1
MB5070:03 Marine Biogeography	1
AQ5006:03 Aquaculture: Principles and Practices	1
BS5260:03 Modelling Ecological Dynamics	1
MB5380:03 Invertebrate Biology	2
AQ5007:03 Aquatic Animal Ecophysiology	2
AQ5004:03 Aquaculture: Stock Improvement	11
AQ5015:03 Sustainable Aquaculture	3
<i>Fisheries Management &amp; Governance - Applications</i>	
MB5310:03 Marine Reserves as Fisheries Management Tools	3
AQ5015:03 Sustainable Aquaculture	3
EV5701:03 Coastal and Marine Management and Conservation	1
MB5620:03 Grand Challenges in Fisheries	1
EV5003:03 Environmental Economics	2



EC5218:03 Economics and Sustainable Resource Management	Trimester 1
<i>Fisheries Technology</i>	
MB5055:03 Biological Oceanography	1
EV5506:03 Remote Sensing (CNS block mode)	9
MB5620:03 Grand Challenges in Fisheries	1
<i>Fisheries Ecology &amp; Conservation</i>	
MB5310:03 Marine Reserves as Fisheries Management Tools	3
MB5620:03 Grand Challenges in Fisheries	1
MB5270:03 Coastal, Estuarine and Mangrove Ecosystems	2
MB5190:03 Coral Reef Ecology	2
MB5004:03 Marine Conservation Biology	2
MB5001:03 Tropical Marine Ecology & Coastal Impacts	11