

# RECOMMENDED STUDY PLAN

2018

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

DEGREE PROGRAM Master of Science-Professional MAJOR Trop Bio & Con-TSV (MSC-TBI)

## Level 5: Year 1

| SP3 | SP1   | SP6/7  | SP2   | SP10/SP11                          |
|-----|---|--|---|------------------------------------|
|     | <b>Major Core:</b> BZ5215<br>Conservation Biology   | <b>Major Skill Core:</b><br>MB5300 Sampling and Experimental Design#<br><br><b>OR</b><br>SC5502:03 Design and Analyses in Ecological Studies-NEW 2019^ | <b>Major Core:</b> BZ5061<br>Behavioural Ecology              | <b>Major Opt Skill Core-List B</b> |
|     | <b>Major Core:</b> BZ5740 Wildlife Ecology and Management   |  | <b>Major Core:</b> BZ5220<br>Population and Community Ecology |                                    |
|     | <b>Major Opt Skill Core-List B</b><br><br><i>SC5202-Required if you have not already completed a statistics subject at university</i> |  | <b>Major Opt Skill Core-List A</b>                            |                                    |
|     | <b>Elective:</b>  |  |   |                                    |

*Note-Boxes without specific subjects listed in them may be rearranged to meet your course needs as long as the total number of subjects and degree structure is met. For example, you may choose to move a SP1 elective in Year 1 to SP7 in Year 2.*

*Note-#Prerequisite for this subject is a basic statistics course from university.*

*Note^-SC5502 is NEW for 2019 and the SP has yet to be confirmed.*

## Level 5: Year 2

| SP3 | SP1              | SP6/7 | SP2   | SP10/SP11 |
|-----|------------------|-------|---|-----------|
|     | <b>Elective:</b> |       | <b>Degree Core:</b> Professional Practice-Choose an Option/Stream from List C |           |
|     | <b>Elective:</b> |       |   |           |
|     | <b>Elective:</b> |       |   |           |

*Note-Professional Practice options are flexible. See List C for full details.*

**Additional Notes:**

The Master of Science (Professional) degree has the following structure:

1. 4 subjects/12cp of theory for your MAJOR CORE
2. 4 subjects/12cp of SKILL subjects for your major
  - a. 1 compulsory skill subject for your major
  - b. 1 skill subject from List A
  - c. 2 skill subjects from List B
3. 4 subjects/12cp of ELECTIVES (see recommended list below)
4. 12 credit points of Professional Practice (Select an Option Stream below)
  - a. Option 1-Research Stream **OR**
  - b. Option 2-Professional Project Stream **OR**
  - c. Option 3-Research & Professional Project Stream

It is generally recommended to take 8 subjects per year, with 3 - 4 in SP1 and SP2 and additional subjects in block mode periods (SP3, SP7, SP10 /11) as necessary.

You need to have fulfilled the 'Assumed Knowledge' or Prerequisites for any subject, before you take them. These are listed in the subject's description online which can be found by searching for a subject within **Subject Search** (<https://secure.jcu.edu.au/app/studyfinder/>). For example, EV5502-Advanced GIS assumes you have already taken EV5505--Introduction to GIS or an equivalent at JCU or at your previous university.

Full subject descriptions and timings of all subjects can be found online using the Subject Search tool.

**Skill Subjects:**

In addition to the **Major Core Skill Subject** (MB5300 OR SC5502), choose 1 subject from **List A** and 2 subjects from **List B**. You must meet the Assumed Knowledge or Prerequisites for any subject selected. See Additional Notes for more details.

| <b>Optional Skill Subjects-List A<br/>(Select 1 subject)</b>        |   |   |
|---|---|---|
| <b>SP1</b>  | <b>SP2</b>  | <b>SP10/SP11</b>  |
| BS5260 Modelling Ecological Dynamics- <i>Next availability 2019</i> | BZ5450 Ecological and Conservation Genetics                         | EV5502 Advanced GIS-TSV*<br><br><i>*Note there is an error in the course paperwork. EV5502 is the option and <b>NOT</b> EV5505:03 Introduction to GIS as your online study plan may indicate.</i> |
|   | EV5110 Environmental and Social Impact Assessment                   |   |
|   | SC5502 Design and Analyses in Ecological Studies - <i>NEW 2019^</i> | EV5506 Remote Sensing-CNS LTD   |

*Note^--SC5502 is NEW for 2019 and the SP has yet to be confirmed.*

| <b>Optional Skill Subjects-List B<br/>(Select 2 subjects)</b>          |   |  |   |
|--|---|--|---|
| <b>SP1</b>   | <b>SP6/7</b>  | <b>SP2</b>   | <b>SP10/SP11</b>  |
| SC5202 Quantitative Methods in Science                                 | BZ5990 Toolkit for the Field Biologist  | BC5203 Introduction to Bioinformatics                                  | AQ5004 Aquaculture Stock Improvement-TSV                                  |
| BS5260 Modelling Ecological Dynamics-<br><i>Next availability 2019</i> | EA5018 Field Studies in Tropical Land & Water Science-CNS LTD   | BZ5450 Ecological & Conservation Genetics                              | EV5502 Advanced GIS-TSV   |
|  | EA5330 Field Techniques-TSV<br><i>Note-This subject be substituted with EA5044-Geological Mapping-TSV in 2019</i> | CH5203 Analytical Chemistry-Advanced                                   | EV5506 Remote Sensing-CNS LTD   |
|  |   | EV5110 Environmental and Social Impact Assessment                      | SC5232 Marine Sensor Technologies and Applications-TSV<br><i>NEW 2019</i> |
|  |   | EV5505 Introduction to Geographic Information Systems                  |   |
|  |   | MA5405 Data Mining   |   |
|  |   | SC5502 Design and Analysis in Ecological Studies-NEW 2019 <sup>^</sup> |   |

Note<sup>^</sup>-SC5502 is NEW for 2019 and the SP has yet to be confirmed.

| <b>Professional Practice Options-List C<br/>(Select 1 Option-Stream)</b>    |   |              |   |                  |
|---|---|--------------|---|------------------|
| <b>Option 1-Research Stream (entrance conditions apply)</b>                 |   |              |   |                  |
| SC5912:06 <b>AND</b> SC5913:06  |   |              |   |                  |
| <i>Note-You may choose which semesters you would like for each subject.</i> |   |              |   |                  |
| <b>SP3</b>  | <b>SP1</b>  | <b>SP6/7</b> | <b>SP2</b>  | <b>SP10/SP11</b> |
|   | SC5912:06 Minor Project, Seminar and Literature Review (Part 1) |              | SC5912:06 Minor Project, Seminar and Literature Review (Part 1) |                  |
|   | SC5913:06 Minor Project, Seminar and Literature Review (Part 2) |              | SC5913:06 Minor Project, Seminar and Literature Review (Part 2) |                  |

| <b>Option 2-Professional Project Stream</b>  |   |              |   |                  |
|--|---|--------------|---|------------------|
| SC5009:12  |   |              |   |                  |
| <i>Note-You may choose which semester you would like for this subject.</i>                   |   |              |   |                  |
| <b>SP3</b>   | <b>SP1</b>  | <b>SP6/7</b> | <b>SP2</b>                                      | <b>SP10/SP11</b> |
|  | SC5009:12 Professional Placement<br><i>Note-available in SP1 after 2018</i> |              | SC5009:12 Professional Placement                |                  |
| <b>Option 3-Research &amp; Professional Project Stream</b>                                   |   |              |   |                  |
| Select 12 credit points from:  |   |              |   |                  |
| <b>SP3</b>   | <b>SP1</b>  | <b>SP6/7</b> | <b>SP2</b>                                      | <b>SP10/SP11</b> |
|  | SC5007:06 Professional Project- <i>NEW 2019</i>                             |              | SC5007:06 Professional Project- <i>NEW 2019</i> |                  |
|  | SC5900:06 Special Topic- <i>NEW 2019</i>                                    |              | SC5900:06 Special Topic- <i>NEW 2019</i>        |                  |
| SC5901:03 Special Topic 1- <i>Note this subject is available in any study period.</i>        |   |              |   |                  |
| SC5902:03 Special Topic 2- <i>Note this subject is available in any study period.</i>        |   |              |   |                  |
| SC5008:03 Professional Placement- <i>Note this subject is available in any study period.</i> |   |              |   |                  |

### **Elective subjects:**

Your degree structure allows you to take 4 subjects/12 cp from any Level 5 subject with a prefix subject code of: AQ, BS, BZ, CH, EA, EV, MA, MB, MI, SC or TV.

**Recommended elective subjects for this Major:** The recommended elective subject sets for specific career pathways and/or or study areas:

| <b>TOPIC</b>   | <b>STUDY PERIOD</b> |
|--|---------------------|
| <i>Plants</i>  |                     |
| BZ5615:03 Plant Survival in a land of Fire, Flood and Drought          | 1, CNS              |
| BZ5620:03 Tropical Flora of Australia                                  | 7, CNS              |
| BZ5650:03 Australian Land Plants: Recognition, Evolution and Diversity | 1,11,2,7 EXT        |
|  |                     |
| <i>Taxa specialisations</i>  |                     |

|   |         |
|---|---------|
| BZ5725:03 Herpetology   | 10, TVL |
| BZ5745:03 Tropical Entomology   | 3 CNS   |
| EV5203:03 Conserving Marine Wildlife: Sea Mammals, Birds and Reptiles | 1 TVL   |
| MB5380:03 Invertebrate Biology  | 2 TVL   |
|   |         |
| <i>Ecology</i>  |         |
| BZ5880:03 Ecology: Distribution, Abundance and Diversity              | 2 CNS   |
| BZ5225:03 Field Ecology   | 2 CNS   |
| BZ5230:03 Ecological Research Methods                                 | 2 CNS   |
| BZ5450:03 Ecological and Conservation Genetics                        | 2 TVL   |
| BZ5480:03 Restoration Ecology   | 1 CNS   |
| MB5160:03 Evolution and Ecology of Reef Fishes                        | 1 TVL   |
| AQ5007:03 Aquatic Animal Ecophysiology                                | 2 TVL   |
| MB5270:03 Coastal, Estuarine & Mangrove Ecosystems                    | 2 TVL   |
| MB5450:03 Behaviour of Marine Animals                                 | 7 TVL   |
|   |         |
| <i>Biology</i>  |         |
| BZ5808:03 Adapting to Environmental Challenges                        | 2 CNS   |
| MB5160:03 Evolution and Ecology of Reef Fishes                        | 1 TVL   |
| MB5400:03 Life History & Evolution of Reef Corals                     | 1 TVL   |
| MI5003:03 Advanced Marine Microbiology                                | 1 TVL   |
| MB5380:03 Invertebrate Biology  | 2 TVL   |
| AQ5007:03 Aquatic Animal Ecophysiology                                | 2 TVL   |
|   |         |
| <i>Foundations</i>  |         |
| BZ5220:03 Population and Community Ecology                            | 2 TVL   |
| BS5470:03 Evolution   | 1 TVL   |
| MB5380:03 Invertebrate Biology  | 2 TVL   |

|   |               |
|---|---------------|
| BS5460:03 Fundamentals of Ecology                                     | 2 TVL         |
|   |               |
| <i>Applied Studies</i>  |               |
| MB5310:03 Marine Reserves as Fisheries Management Tools               | 3 TVL         |
| AQ5006:03 Principles and Practices of Aquaculture                     | 1 TVL         |
| MB5003:03 Fisheries Science   | 1 TVL         |
| AQ5015:03 Sustainable Aquaculture                                     | 7 TVL         |
| MB5610:03 Fishing Gear and Technologies                               | 2 TVL         |
| EV5014:03 Managing Tropical Fisheries                                 | 10 TVL        |
|   |               |
| <i>Applications for Conservation</i>                                  |               |
| BZ3215:03 Conservation Biology  | 1 TVL, CNS    |
| EV5020:03 Human Dimensions of Nature, Environment and Conservation    | 1 TVL         |
| EV5107:03 Environmental Management Policy & Governance                | 3 TVL         |
| BZ5450:03 Ecological & Conservation Genetics                          | 2 TVL         |
| EV5003:03 Environmental Economics                                     | 2 TVL         |
|   |               |
| <i>Coastal Resource Management</i>                                    |               |
| EV5406:03 Coral Reef Geomorphology                                    | 1 TVL         |
| EV5203:03 Conserving Marine Wildlife: Sea Mammals, Birds and Reptiles | 1 TVL         |
| EV5020:03 Human Dimensions of Nature, Environment and Conservation    | 1 TVL         |
| MB5270:03 Coastal, Estuarine & Mangrove Ecosystems                    | 2 TVL         |
|   |               |
| <i>Unique Ecosystems</i>  |               |
| SC5810:03 Marine Ecology and Upwelling                                | 7 (Galapagos) |
| MB5001:03 Tropical Marine Ecology and Coastal Impacts                 | 10 (Thailand) |