

## RECOMMENDED STUDY PLAN

2022

DEGREE Bachelor of Marine Science

STREAM Physics

NAME \_\_\_\_\_

To assist you with subject information, and to avoid and clashes/issues, you **MUST** consult with your [CSE Course/Major Advisor](#) and refer to [Subject Search](#).

If you would prefer a part-time study plan, please adjust the below planner, reviewing subject prerequisites to ensure you are on track for course completion.

For elective subject selection - Lists of subjects grouped according to potential career aspirations and interests can be accessed [here](#). Options available include recommended marine science related areas of Chemistry, Earth Science, Environmental Science, Fisheries, Marine Biology, Maths and Physics as well as a number of additional general science related areas.

	Study Period 1 - SP1	Study Period 2 - SP2
<b>Year 1</b>	<b>Degree Core:</b> <a href="#">BS1007</a> Introduction to Biodiversity	<b>Degree Core:</b> <a href="#">EA1110</a> Evolution of the Earth
	<b>Degree Core:</b> <a href="#">CH1001</a> Chemistry: A Central Science PREREQ: CH1020*	<b>Degree Option Core:</b> <a href="#">SC1102</a> Modelling Natural Systems PREREQ: MA1020* OR MA0020 OR SENIOR MATHEMATICS OR EQUIVALENT. <b>OR</b> <a href="#">SC1109</a> Modelling Natural Systems – Advanced^ PREREQ: [(SENIOR CHEMISTRY OR CH1020 OR CH0020) AND (MATHS B OR MA1020* OR MA0020)] OR ADMISSION TO 50110M – ALLOW CONCURRENT CH1020 & MA1020
	<b>Degree Core:</b> <a href="#">MA1000</a> Mathematical Foundations PREREQ: MA1020* OR MA0020 OR Maths B OR Maths C OR Admission to 116209 or 116409 or 116309	<b>Degree Core:</b> <a href="#">MB1110</a> Introductory Marine Science PREREQ: [(SENIOR CHEMISTRY OR CH1020* OR CH0020) AND (MATHS B OR MA1020* OR MA0020)] OR ADMISSION TO 50110M - ALLOW concurrent for CH1020 & MA1020
	<b>Stream Option:</b> <a href="#">PH1005</a> Advanced Stream Physics 1 PREREQ: Maths B OR MA1020* OR MA1000 OR MA1008	<i>Elective: <a href="#">MA1003</a> Mathematical Techniques – Recommended</i> PREREQ: MA1000 OR MA1011 OR MA1009

<sup>^</sup>SC1109 may be taken as an alternative to SC1102 if you would prefer. It is a required subject in the Advanced Science program if you are considering that pathway.

\*Missing Chemistry from high school, select CH1020 Preparatory Chemistry – **SP3 (Jan-Feb)**

\*Missing high school intermediate level Mathematics B, select MA1020 Preparatory Mathematics – **SP3 (Jan-Feb)**

**If you require BOTH CH1020 & MA1020 please speak with your course advisor prior to beginning your studies.**

To avoid progression issues it is recommended you take CH1020 in SP3, MA1020 in SP1 and discuss taking MA1000 in SP2 with your course advisor.

	Study Period 1 - SP1	Study Period 2 - SP2
<b>Year 2</b>	<b>Degree Option Core:</b> <u>SC2202</u> Quantitative Methods in Science PREREQ: SC1102 OR MA1020* OR MATH B OR EQUIVALENT <b>OR</b> <u>SC2209</u> Quantitative Methods in Science-Advanced PREREQ: SC1109 AND MA1003 PLUS 6CP OF OTHER LEVEL 1 SUBJECTS	<b>Degree Core:</b> <u>EV2502</u> Introduction to Geographic Information Systems PREREQ: 12CP LEVEL 1 SUBJECTS
	<b>Degree Core:</b> <u>CH2042</u> Marine Chemistry and Chemical Ecology PREREQ: CH1001 OR CH1011	<b>Degree Option Core:</b> <u>PH2006</u> Marine Physics <b>OR</b> <u>PH2009</u> Advanced Marine Physics PREREQ: PH1005 AND MA1000
	<b>Degree Core:</b> <u>MB2050</u> Functional Biology of Marine Organisms PREREQ: ZL1001 OR BZ1004 OR AG1004 OR BZ1007 OR BS1007 OR BZ1006	<b>Elective:</b> <i>*see notes above on options</i>
	<b>Stream Options List 1:</b>	<b>Stream Options List 1:</b>

	Study Period 1 - SP1	Study Period 2 - SP2
<b>Year 3</b>	<b>Degree Core:</b> <u>MB3050</u> Biological Oceanography PREREQ: BS1007 OR BZ1007 AND MB2050 AND SC2202 OR BS1007 OR BZ1007 AND MB2050 AND SC2202 OR SC2209 OR BS2001 OR BZ2001	<b>Degree Core</b> <u>EA3110</u> : Sedimentology and Stratigraphy PREREQ: EA1110
	<b>Degree Core:</b> <u>EV3406</u> Coral Reef Geomorphology PREREQ: 12CP LEVEL 2 INCLUDING 6CP LEVEL 2 EV OR EA OR MB SUBJECTS	<b>Degree Core:</b> <u>MB3270</u> Coastal, Estuarine and Mangrove Ecosystems PREREQ: BS1007 OR BZ1007 AND (MB2050 OR BS2460) AND (SC2202 OR SC2209 OR BS2001 OR BZ2001)
	<b>Degree Core:</b> <u>SC3010</u> Sensors and Sensing for Scientists PREREQ: BZ2001 OR SC2202 OR SC2209 OR SC2201	<b>Degree Core:</b> <u>EV3401</u> Coastal and Catchment Geomorphology PREREQ: 12CP LEVEL 2 INCLUDING 6CP LEVEL 2 EV OR EA SUBJECTS
		<b>Stream Option:</b> <u>PH3006</u> Oceanography and Meteorology PREREQ: MA2000 OR PH2019
		<b>SP11 (Nov-Dec)</b> <b>Degree Core:</b> <u>EA3640</u> Advanced Environmental and Marine Geoscience Technologies and Applications PREREQ: 12CP LEVEL 2 AND 3CP LEVEL 1 EA OR MB SUBJECTS

<b>Stream Options List 1:</b>	
<b>Study Period 1 - SP1</b>	<b>Study Period 2 - SP2</b>
<u>PH2002</u> Classical Mechanisms and Quantum Physics 1 PREREQ: MA1003 AND PH1005 AND (PH1006 OR PH1007 OR (EG1012 AND EG1011))	<u>PH2240</u> Atomic and Nuclear Physics PREREQ:PH2002 AND MA1003
<u>PH2019</u> Introduction to Electromagnetism Optics and Early Quantum PREREQ: (EG1012 OR PH1005) AND MA1003	

### ADDITIONAL COURSE RULES

Must complete a minimum of 18 credit points of Level 3 subjects.

### ADDITIONAL COMPLETION REQUIREMENTS

Applicants who have not completed high school intermediate level Mathematics B (or equivalent) must select MA1020: Preparatory Mathematics as part of their study plan to successfully complete the Bachelor of Marine Science.

Applicants who have not completed high school Chemistry (or equivalent) must select CH1020: Preparatory Chemistry as part of their study plan to successfully complete the Bachelor of Marine Science.

Students should undertake the above subject/s in intensive mode where available and be aware that restrictions may apply to electives if they wish to complete in the normal three (3) year time frame. These subjects typically start earlier than the standard course commencement date. Contact JCU on 1800 246 446 for more information.

This course involves mandatory field work and any costs associated with that field work will be at the student's expense.

### COURSE PROGRESSION REQUISITES

Must complete 18 credit points of Level 1 or 2 subjects before attempting any Level 3 subject.

### ADDITIONAL INFORMATION

[Bachelor of Marine Science handbook](#)