JAMES COOK UNIVERSITY AUSTRALIA

The information provided is designed to provide helpful information on your study plan. Changes to subject information after this time may affect your study plan. Please refer to the enrolment resources for up to date information.

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
Year 1	**Degree Core:** BS1007 Introduction to Biodiversity	**Degree Core:** EA1110 Evolution of the Earth
	Degree Core: CH1001 Chemistry: A Central Science **PREREQ: CH1020***	**Degree Option Core:** SC1102 Modelling Natural Systems **PREREQ: MA1020* OR MA0020 OR SENIOR MATHEMATICS OR EQUIVALENT.** **OR** SC1109 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**
	Degree Core: MA1000 Mathematical Foundations **PREREQ: MA1020* OR MA0020 OR Maths B OR Maths C OR Admission to 116209 or 116409 or 116309**	**Degree Core:** MB1110 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**
	Stream Option: PH1005 Advanced Stream Physics 1 **PREREQ: Maths B OR MA1020* OR MA1000 OR MA1008**	*Elective: MA1003 Mathematical Techniques – Recommended* PREREQ: MA1000 OR MA1011 OR MA1009

^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 you course advisor.

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

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

Stream Options List 1:	
Study Period 1 - SP1	**Study Period 2 - SP2**
PH2002 Classical Mechanisms and Quantum Physics 1 **PREREQ: MA1003 AND PH1005 AND (PH1006 OR PH1007 OR (EG1012 AND EG1011))**	PH2240 Atomic and Nuclear Physics **PREREQ:PH2002 AND MA1003**
PH2019 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