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 2021

DEGREE Bachelor of Science MAJOR Physics (PCS) – TSV only after 1st Semester

NAME _____ MINOR Mathematics (MTM)

To assist you with subject information, we recommend you 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.

	Study Period 1 - SP1	Study Period 2 - SP2
Year 1	**Degree Core:** SC1101 Science Technology and Truth	**Degree Opt Core** SC1102 Modelling Natural Systems **PREREQ: MA1020** **OR** SC1109 Modelling Natural Systems-Advanced^ **PREREQ: MA1000 OR MA1009**
	Minor Core: MA1000 Mathematical Foundations **PREREQ: MA1020 OR MATHEMATICS B OR MATHS C**	**Minor Core:** MA1003 Mathematical Techniques **PREREQ: MA1000 OR MA1011 OR MA1009**
	Major Core: PH1005 Advanced Stream Physics 1 **PREREQ: Maths B OR MA1020 OR MA1000 OR MA1008.**	**Major Core:** PH1007 Advanced Stream Physics 2 **PREREQ: ((MATHS B OR EQUIVALENT OR MA1020) AND PH1005) OR (PHYSICS AND MATHS C)**
		Degree Core: CH1020 Preparatory Chemistry # *# This subject is equivalent to chemistry from high school. This core subject may be replaced by an elective if you pass the chemistry competency test.*

SP3 (Jan-Feb)
Degree Core: MA1020 Preparatory Math* **This subject is equivalent to QLD-Maths Methods from high school. This core subject may be replaced by an elective if you pass the math competency test.*

^ Note- SC1109 is compulsory in the Advanced BSc Program and should be taken instead of SC1102 if you are considering that pathway.

	Study Period 1 - SP1	Study Period 2 - SP2
Year 2	**Degree Core:** SC2202 Quantitative Methods in Science **PREREQ: SC1102 OR MA1020 OR MATHS B OR EQUIVALENT** **OR** SC2209 Quantitative Methods in Science-Advanced **PREREQ: SC1109 AND MA1003 PLUS 6CP OF OTHER LEVEL 1 SUBJECTS**	**Degree Opt Core Skill-List 2:**
	Major Core: PH2002 Classical Mechanisms and Quantum Physics 1 **PREREQ: MA1003 AND PH1005 AND (PH1006 OR PH1007 OR (EG1012 AND EG1011))**	**Major Core:** PH2240 Atomic and Nuclear Physics **PREREQ:PH2002 AND MA1003**
	Major Core: PH2019 Introduction to Electromagnetism Optics and Early Quantum **PREREQ: (EG1012 OR PH1005) AND MA1003**	**Minor Core:** MA2210 Linear Algebra **PREREQ: MA1003**
	Minor Core: MA2000 Mathematics for Scientists and Engineers **PREREQ: MA1003**	**Elective/2nd Minor:**

	Study Period 1 - SP1	Study Period 2 - SP2
Year 3	**Degree Core:** SC3008 Professional Placement - *available any SP*	
	Degree Core: SC3010 Sensors and Sensing for Scientists **PREREQ: SC2202/SC2209**	**Major Core:** PH3002 Quantum Physics 2 **PREREQ: MA2000 AND PH2002**
	Major Core: PH3008 Statistical Mechanics and Transport **PREREQ: PH2019 AND PH2002 AND MA2000**	**Elective/2nd Minor:**
	Major Core: PH3019 Electromagnetic Phenomena **PREREQ: MA2000 and PH2019**	**Elective/2nd Minor:**
	Elective/2nd Minor:	

Further Degree Options:

Skill-List 2:	
Study Period 1 – SP1	**Study Period 2 – SP2**
CP2404 Database Modelling	EV2502 Introduction to Geographic Information Systems **PREREQ: 12CP LEVEL 1 SUBJECTS**
	CH2103 Analytical Chemistry – *TSV only* **PREREQ: CH1001 OR CH1011**