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   2021-2022

DEGREE Bachelor of Engineering (Honours) MAJOR Electronic Systems and Internet of Things Engineering (IOT)

NAME _____   MINOR Physics (PHY)

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.

Year 1

Study Period 1 - SP1	Study Period 2 - SP2
Degree Core: EG1000 Engineering 1	**Degree Core:** EG1010 Process Engineering
Degree Core: EG1002 Computing and Sensors	**Degree Core:** EG1011 Statics and Dynamics **PREREQ: PH1005 OR (PHYSICS AND MATHS C)**
Degree Core: MA1000 Mathematical Foundations **PREREQ: MA1020 OR MATHS B OR MATHS C**	**Degree Core:** EG1012 Electric Circuits
Degree Core: PH1005 Advanced Stream Physics 1 **PREREQ: MATHS B OR MA1020 OR MA1000 OR MA1008**	**Degree Core:** MA1003 Mathematical Techniques **PREREQ: MA1000 OR MA1011 OR MA1009**

Year 2

Study Period 1 - SP1	Study Period 2 - SP2
Degree Core: MA2000 Mathematics for Scientists and Engineers **PREREQ: MA1003**	**Major Core:** CP1404 Programming II **PREREQ: CP1801 OR CP1401 OR CP1200 OR EG1002 OR CP2200 OR SC1201** **TRIMESTER 3 (Sept-Dec)**
Major Core: EE2201 Circuit Theory **PREREQ: EG1012 AND MA2000**	**Major Core:** EE2300 Electronics 1 **PREREQ: EG1012**
Major Core: CC2510 Digital Logic and Computing Methods **PREREQ: EG1002 OR CP1300**	**Major Core:** CC2511 Embedded Systems Design **PREREQ: EG1002 OR CP1300 OR CP1404**
Major Core: PH2019 Introduction to Electromagnetism Optics and Early Quantum **PREREQ: (EG1012 OR PH1005) AND MA1003**	**Minor Core List 1:**

Year 3

Study Period 1 - SP1	Study Period 2 - SP2
Degree Core: EG3000 Introduction to Systems Engineering and Project Management **PREREQ: EG1000 AND EG1002 AND EG1010 AND EG1011 AND EG1012 AND MA1000 AND MA1003 AND (PH1005 OR EG1001) OR 36CP**	**Major Core:** CC3501 Computer Interfacing and Control **PREREQ: CC2511**
Major Core: EE3010 Digital Signal Processing **PREREQ: 48CP**	**Major Core:** EE3600 Automatic Control 1 **PREREQ: EG1012 AND MA2000**
Major Core: EE3901 Sensor Technologies **PREREQ: EE2201 AND (CC2511 OR CC2003)**	**Major Core:** EE3700 Communications Systems Principles **PREREQ: EE2201**
Minor Core: PH2002 Classical Mechanics and Quantum Physics 1 **PREREQ: MA1003 AND PH1005 AND (PH1006 OR PH1007 OR (EG1012 AND EG1011))**	**Major Core:** MA3405 Statistical Data Mining for Big Data **PREREQ: MA2405 OR MA2000 OR SC2202 OR SC2209**

Study Period 1 - SP1	Study Period 2 - SP2
Degree Core: <u>EG4011</u> Thesis Part 1 of 2 **PREREQ: 72CP**	**Degree Core:** <u>EG4012</u> Thesis Part 2 of 2 **PREREQ: EG4011**
Major Core: <u>CC4510</u> Digital System Design **PREREQ: CC3501**	**Major Core:** <u>CC4950</u> Design Project **PREREQ: CC3501 AND (CC3910 OR EE3700) AND EE3901**
Major Core: <u>CP3406</u> Mobile Computing **PREREQ: CP1404 OR CP1804 AND 18CP OF CP SUBJECTS**	**Major Core:** <u>CP3404</u> Information Security **PREREQ: (ADMISSION TO BACHELOR OF INFORMATION TECHNOLOGY OR BACHELOR OF BUSINESS PLUS CP2414) OR (ADMISSION TO BACHELOR OF ENGINEERING - BACHELOR OF INFORMATION TECHNOLOGY PLUS 18 CREDIT POINTS OF SUBJECTS INCLUDING CP1402)**
Minor Core List 1 or 2:	**Minor Core List 1 or 2:**

(Year 4)

Further Degree Options: Select 1 Subject from List 1 AND 2 subjects from List 1 OR List 2

Minor Core List 1:	
Study Period 1 – SP1	**Study Period 2 – SP2**
<u>PH3008</u> Statistical Mechanics and Transport **PREREQ: PH2019 AND PH2002 AND MA2000**	<u>PH2240</u> Atomic and Nuclear Physics – *TSV only* **PREREQ: PH2002 AND MA1003**

Minor Core List 2:	
Study Period 1 – SP1	**Study Period 2 – SP2**
<u>PH3019</u> Electromagnetic Phenomena - *TSV only* **PREREQ: MA2000 AND PH2019**	<u>PH3002</u> Quantum Physics 2 – *TSV only* **PREREQ: MA2000 AND PH2002**
<u>MA3211</u> Mathematical Modelling and Differential Equations - *TSV only* **PREREQ: MA2000 AND (MA2210 OR MA2201)**	<u>PH3006</u> Oceanography and Meteorology – *TSV only* **PREREQ: MA2000 AND PH2019**
	<u>MA2210</u> Linear Algebra **PREREQ: MA1003**