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 Engineering (Honours) – Bachelor of Information Technology

NAME _____   MAJOR Electrical and Electronic Engineering (EEL)

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:** 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

*Students may be required to take MA1020 in SP3 which will count as an elective line.

	Study Period 1 - SP1	Study Period 2 - SP2
Year 2	**Degree Core:** MA2000 Mathematics for Scientists and Engineers PREREQ: MA1003	**Major Core:** CC2511 Embedded Systems Design PREREQ: EG1002 OR CP1300 OR CP1404
	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 CP1401	

Trimester 1 (Feb-May)
Degree Core: CP1402 Internet Fundamentals

Trimester 3 (Sept-Dec)
Degree Core: CP1403 Design Thinking
Degree Core: CP1404 Programming II PREREQ: CP1401 OR EG1002

	Study Period 1 - SP1	Study Period 2 - SP2
Year 3	**Major Core:** PH2019 Introduction to Electromagnetism Optics and Early Quantum **PREREQ: (EG1012 OR PH1005) AND MA1003**	**Major Core:** EE3600 Automatic Control 1 **PREREQ: EG1012 AND MA2000**
	Major Core: EE3010 Digital Signal Processing **PREREQ: 48CP**	**Major Core:** EE3700 Communications Systems Principles **PREREQ: EE2201**
		Major Core: CC3501 Computing Interfacing and Control **PREREQ: CC2511**

	Trimester 3 (Sept-Dec)
	Degree Core: CP2404 Database Modelling

Trimester TBA		
	Degree Core: CP2406 Programming III **PREREQ: CP1404**	**Degree Core:** CP3407 Advanced Software Engineering **PREREQ: CP1404 AND 18CP OF SUBJECTS**

	Study Period 1 - SP1	Study Period 2 - SP2
Year 4	**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:** EE4600 Automatic Control 2 **PREREQ: EE3600**
	Major Core: EE3300 Electronics 2 **PREREQ: EE2300**	**List Options:** *see tables below for details*
	Major Core: EE3400 Power Engineering 1 **PREREQ: EE2201**	

Trimester TBA		
List Options: *see tables below for details*	**List Options:** *see tables below for details*	**List Options:** *see tables below for details*

	Study Period 1 - SP1	Study Period 2 - SP2
Year 5	**Degree Core:** EG4011 Thesis Part 1 of 2 **PREREQ: 72CP**	**Degree Core:** EG4012 Thesis Part 2 of 2 **PREREQ: EG4011**
	Major Core: EE4010 Analog Filters and Signals **PREREQ: EE2201**	**Major Core:** EE4400 Power Engineering 2 **PREREQ: EE3400**
	List Options: *see tables below for details*	**Major Core:** EE4500 Electrical and Electronic Engineering Design **PREREQ: EE3600 AND EE3300 AND EE3001**
		Major Core: EG4013 Asset Management, Maintenance and Reliability **PREREQ: (EG1000 AND EG1002 AND EG1010 AND EG1011 AND EG1012 AND MA1000 AND MA1003 AND (PH1005 OR EG1001)) OR 36CP**

Trimester TBA	
List Options: *see tables below for details*	

Further Degree Options:

Select 1 subject from List 1 **AND** Select 3 subjects from List 2 **AND** Select any 2 undergraduate subjects OR if required to take MA1020 select 1 undergraduate subject.

List 1: Select 1 subject		
Trimester 1 (Feb-May)	**Trimester 2 (Jun-Aug)**	**Trimester 3 (Sept-Dec)**
CP1406 Web Design and Development	CP1407 Introductory Machine Learning and Data Science	
Trimester TBA		
CP2410 Algorithms and Data Structures **PREREQ: 6CP OF CP SUBJECTS**	CP2405 Collective Intelligence and Entrepreneurship **PREREQ: 24CP**	CP2409 Network Forensics and Data Communications **PREREQ: CP1402**
CP2411 3D Modelling and Animation **PREREQ: 6CP OF CP SUBJECTS**	CP2408 Design Thinking and Creative IT Industries **PREREQ: CP1403**	CP2412 Game Design and Technologies **PREREQ: 6CP OF CP SUBJECTS**

List 2: Select 3 subjects		
Trimester TBA		
CP3402 Content Management Systems **PREREQ: (CP1404 OR CP1804 AND CP1406 OR CP1806) OR CP2010, AND 24CP OF CP SUBJECTS**	CP3404 Information Security **PREREQ: 18CP OF SUBJECTS, INLCUDING CP1402**	CP3406 Mobile Computing **PREREQ: CP1404 OR CP1804**
CP3403 Data Mining **PREREQ: (CP2403 AND CP2404) OR (18 CREDIT POINTS OF UNDERGRADUATE SUBJECTS INCLUDING 6 CREDIT POINTS OF CP SUBJECTS)**	CP3405 Design Thinking and Project Management **PREREQ: CP2408**	CP3408 Game Engine and Simulation **PREREQ: (CP1404 OR CP1804) AND 18 CP OF CP SUBJECTS**