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

Mid-Year Entry 2021

DEGREE Bachelor of Engineering (Honours) – Bachelor of Science NAME _____

BEng. MAJOR Chemical Engineering (CEM) - BSc MAJOR Choose a Major from Table B

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	*MID-YEAR ENTRY*	**Study Period 2 - SP2**
		Degree Core: EG1010 Process Engineering
		Degree Core: EG1012 Electric Circuits
		BSc Major Core:
		List Options: *see information below*

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

Year 3	**Study Period 1 - SP1**	**Study Period 2 - SP2**
	Degree Core: MA2000 Mathematics for Scientists and Engineers **PREREQ: MA1003**	**BEng Major Core:** CH2103 Analytical Chemistry **PREREQ: CH1001 OR CH1011**
	BEng Major Core: CH1001 Chemistry: A Central Science **PREREQ: CH1020 OR EG1010 OR SENIOR CHEMISTRY**	**BEng Major Core:** CH1002 Chemistry: Principles & Applications **PREREQ: CH1001 OR CH1011**
	BEng Major Core: CL2501 Process Analysis **PREREQ: EG1010**	**BEng Major Core:** CL2502 Chemical Engineering Thermodynamics **PREREQ: CL2501 AND MA2000**
	BSc Major Core:	**BSc Major Core:**

	Study Period 1 - SP1	Study Period 2 - SP2
Year 4	**BEng Major Core:** ME2512 Thermofluid Mechanics **PREREQ: EG1011**	**BEng Major Core:** EE3600 Automatic Control 1 **PREREQ: EG1012 AND MA2000**
	BEng Major Core: CL3021 Mass Transfer Operations **PREREQ: CL2501 AND MA2000**	**BEng Major Core:** ME3512 Heat and Mass Transfer **PREREQ: MA2000**
	BEng Major Core: CL3030 Reactor Design **PREREQ: CL2501 AND MA2000**	**BEng Major Core:** CS3008 Fluid Mechanics **PREREQ: MA2000 AND ME2512**
	BSc Major Core:	**BEng Major Core:** CL4538 Bioprocess Engineering **PREREQ: CL2502 OR CL3010 AND CL3021 AND CL3030**

	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**
	BEng Major Core: CL4071 Chemical Engineering Design (Part 1 of 2) **PREREQ: CL3010 AND CL3021 AND CL3030 AND CL4538 AND CS3008 AND ME3512**	**BEng Major Core:** CL4537 Minerals and Solids Processing **PREREQ: 48CP**
	BSc Major Core:	**BEng Major Core:** CL4072 Chemical Engineering Design (Part 2 of 2) **PREREQ: CL4071**
	BSc Major Core:	**List Options:** *see information below*

	Study Period 1 - SP1	
Year 6	**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**	*MID-YEAR COMPLETION*
	BEng Major Core: CL4040 Safety, Environment and Sustainability in the Process Industries **PREREQ: 48CP**	
	List Options: *see tables below for details*	
	List Options: *see tables below for details*	

Further Degree Options:
Select 2 subjects from List 1* **AND** Select 2 Level 2 or 3 Science subjects **AND** Select a BSc Major from Table B

List 1:	
Study Period 1 – SP1	**Study Period 2 – SP2**
CS2001 Engineering Strength of Materials **PREREQ: EG1011**	CP1404 Programming II **PREREQ: CP1801 OR CP1401 OR CP1200 OR EG1002 OR CP2200 OR SC1201**
EV2301 Urban Geography and Design **PREREQ: 12CP LEVEL 1 SUBJECTS**	EA1110 Evolution of the Earth
PH2002 Classical Mechanics and Quantum Physics 1 **PREREQ: MA1003 AND PH1005 AND (PH1006 OR PH1007 OR (EG1012 AND EG1011))**	CC2511 – Embedded Systems Design **PREREQ: EG1002 OR CP1300 OR CP1404**
PH2019 Introduction to Electromagnetism Optics and Early Quantum **PREREQ: (EG1012 OR PH1005) AND MA1003**	CP2406 Programming III **PREREQ: CP1404 OR CP1804 OR CP1300**
EE4000 Signal Processing 3 – *TSV only* **PREREQ: 48CP**	CS2004 Surveying and Construction – *TSV ONLY, offered ODD years only*
ME4521 Bulk Materials Handling – *TSV only, offered ODD years only* **PREREQ: 48CP**	EG2010 Materials Science and Engineering – *TSV only*
MA2211 - Discrete Mathematics – *TSV ONLY* **PREREQ: MATHS B**	EV2502 Introduction to Geographic Information Systems **PREREQ: 12CP LEVEL 1 SUBJECTS**
	MA2210 - Linear Algebra **PREREQ: MA1003**
	ME2525 Machine Element Design – *TSV ONLY* **PREREQ: CS2001**
	PH2240 Atomic and Nuclear Physics – *TSV ONLY* **PREREQ: PH2002 AND MA1003**
	CC3501 Computer Interfacing and Control **PREREQ: CC2511**

SP11 (Nov-Feb)
EV3502 Advanced Geographic Information Systems – *TSV ONLY* **PREREQ: AT LEAST 12CP LEVEL 2 INCLUDING EV2502**

* If undertaking MA1020 only choose 1 subject from this list.