

RECOMMENDED STUDY PLAN

2022

DEGREE Bachelor of Engineering (Honours) – Bachelor of Information Technology

NAME _____ MAJOR Mechanical Engineering (MEN)

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: <u>EG1000</u> Engineering 1	Degree Core: <u>EG1010</u> Process Engineering
	Degree Core: <u>EG1002</u> Computing and Sensors	Degree Core: <u>EG1011</u> Statics and Dynamics PREREQ: PH1005 OR (PHYSICS AND MATHS C)
	Degree Core: <u>MA1000</u> Mathematical Foundations PREREQ: MA1020 OR MATHS B OR MATHS C	Degree Core: <u>EG1012</u> Electric Circuits
	Degree Core: <u>PH1005</u> Advanced Stream Physics 1 PREREQ: MATHS B OR MA1020 OR MA1000 OR MA1008	Degree Core: <u>MA1003</u> 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: <u>MA2000</u> Mathematics for Scientists and Engineers PREREQ: MA1003	Major Core: <u>EG2010</u> Materials Science and Engineering
	Major Core: <u>ME2512</u> Thermofluid Mechanics PREREQ: EG1011	Major Core: <u>ME2525</u> Machine Element Design PREREQ: CS2001
	Major Core: <u>CS2001</u> Engineering Strength of Materials PREREQ: EG1011	

Trimester 1 (Feb-May)
Degree Core: <u>CP1402</u> Internet Fundamentals

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

	Study Period 1 - SP1	Study Period 2 - SP2
Year 3	Degree Core: <u>EG3000</u> 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: <u>EE3600</u> Automatic Control 1 PREREQ: EG1012 AND MA2000
	Major Core: <u>ME2521</u> Dynamics of Machine Elements PREREQ: EG1011	Major Core: <u>CS3008</u> Fluid Mechanics PREREQ: MA2000 AND ME2512
	List Options: <i>see tables below for details</i>	Major Core: <u>ME3512</u> Heat and Mass Transfer PREREQ: MA2000
		Major Core: <u>ME3525</u> Mechanical Design PREREQ: ME2525
Trimester TBA		
	Degree Core: <u>CP2406</u> Programming III PREREQ: CP1404	

	Study Period 1 - SP1	Study Period 2 - SP2
Year 4	Major Core: <u>EG3001</u> Finite Element Analysis PREREQ: EG1002 AND EG1011 AND MA2000	Major Core: <u>EG4013</u> 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
	Major Core: <u>ME3511</u> Dynamics and Acoustics PREREQ: MA2000 AND ME2521	Major Core: <u>ME4515</u> Advanced Mechanical Engineering Design PREREQ: ME3525
	Major Core: <u>ME3515</u> Advanced Manufacturing Engineering – <i>offered EVEN years only*</i> PREREQ: ME2525	
Trimester 3 (Sept-Dec)		
		Degree Core: <u>CP2404</u> Database Modelling
Trimester TBA		
Degree Core: <u>CP3407</u> Advanced Software Engineering PREREQ: CP1404 AND 18CP OF SUBJECTS	List Options: <i>see tables below for details</i>	

**Will need to swap with a List subject depending on the year.*

	Study Period 1 - SP1	Study Period 2 - SP2
Year 5	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>ME4513</u> Advanced Fluid Mechanics PREREQ: CS3008	Major Core: <u>ME4522</u> Energy, Conversion and Refrigeration PREREQ: ME2512
		List Options: <i>see tables below for details</i>
Trimester TBA		
List Options: <i>see tables below for details</i>	List Options: <i>see tables below for details</i>	List Options: <i>see tables below for details</i>

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 - already in Major PREREQ: 18CP OF SUBJECTS, INCLUDING CP1402	CP3406 Mobile Computing - already in Major 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