

## RECOMMENDED STUDY PLAN

2021-2022

DEGREE Bachelor of Engineering (Honours) MAJOR Mechanical Engineering (MEN)

NAME \_\_\_\_\_ MINOR Software (SOF)

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	<b>Degree Core:</b> <u>EG1000</u> Engineering 1	<b>Degree Core:</b> <u>EG1010</u> Process Engineering
	<b>Degree Core:</b> <u>EG1002</u> Computing and Sensors	<b>Degree Core:</b> <u>EG1011</u> Statics and Dynamics PREREQ: PH1005 OR (PHYSICS AND MATHS C)
	<b>Degree Core:</b> <u>MA1000</u> Mathematical Foundations PREREQ: MA1020 OR MATHS B OR MATHS C	<b>Degree Core:</b> <u>EG1012</u> Electric Circuits
	<b>Degree Core:</b> <u>PH1005</u> Advanced Stream Physics 1 PREREQ: MATHS B OR MA1020 OR MA1000 OR MA1008	<b>Degree Core:</b> <u>MA1003</u> Mathematical Techniques PREREQ: MA1000 OR MA1011 OR MA1009

	Study Period 1 - SP1	Study Period 2 - SP2
Year 2	<b>Degree Core:</b> <u>MA2000</u> Mathematics for Scientists and Engineers PREREQ: MA1003	<b>Major Core:</b> <u>EG2010</u> Materials Science and Engineering
	<b>Major Core:</b> <u>CS2001</u> Engineering Strength of Materials PREREQ: EG1011	<b>Major Core:</b> <u>ME2525</u> Machine Element Design PREREQ: CS2001
	<b>Major Core:</b> <u>ME2512</u> Thermofluid Mechanics PREREQ: EG1011	<b>Major Core:</b> <u>EE3600</u> Automatic Control 1 PREREQ: EG1012 AND MA2000
	<b>Major Core:</b> <u>ME2521</u> Dynamics of Machine Elements PREREQ: EG1011	

### Trimester 3 (Sept-Dec)

**Minor Core:** CP1404 Programming II  
PREREQ: CP1801 OR CP1401 OR CP1200 OR EG1002 OR CP2200 OR SC1201

	Study Period 1 - SP1	Study Period 2 - SP2
<b>Year 3</b>	<b>Major Core:</b> <u>EG3001</u> Finite Element Analysis PREREQ: EG1002 AND EG1011 AND MA2000	<b>Major Core:</b> <u>CS3008</u> Fluid Mechanics PREREQ: MA2000 AND ME2512
	<b>Major Core:</b> <u>ME3511</u> Dynamics and Acoustics PREREQ: MA2000 AND ME2521	<b>Major Core:</b> <u>ME3512</u> Heat and Mass Transfer PREREQ: MA2000
	<b>Major Core:</b> <u>ME3515</u> Advanced Manufacturing Engineering – <i>offered EVEN years only*</i> PREREQ: ME2525	<b>Major Core:</b> <u>ME3525</u> Mechanical Design PREREQ: ME2525
	<b>Minor Core list 1:</b>	<b>Minor Core:</b> <u>CP2406</u> Programming III PREREQ: CP1404 OR CP1804 OR CP1300

	Study Period 1 - SP1	Study Period 2 - SP2
<b>Year 4</b>	<b>Degree Core:</b> <u>EG4011</u> Thesis Part 1 of 2 PREREQ: 72CP	<b>Degree Core:</b> <u>EG4012</u> Thesis Part 2 of 2 PREREQ: EG4011
	<b>Degree Core:</b> <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	<b>Major Core:</b> <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
	<b>Major Core:</b> <u>ME4513</u> Advanced Fluid Mechanics PREREQ: CS3008	<b>Major Core:</b> <u>ME4515</u> Advanced Mechanical Engineering Design PREREQ: ME3525
	<b>Minor Core list 1:</b>	<b>Major Core:</b> <u>ME4522</u> Energy, Conversion and Refrigeration PREREQ: ME2512

**Further Degree Options:**

<b>Minor Core List 1:</b>	
Study Period 1 – SP1	Study Period 2 – SP2
<u>CP1402</u> Internet Fundamentals - <i>SP1 External, also SP2 Internal</i> <b>TRIMESTER 1 (Feb-May)</b>	<u>CP2412</u> Game Design and Technologies - <i>External</i> PREREQ: 6CP OF CP SUBJECTS
<u>CP2404</u> Database Modelling	<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)
<u>CP2410</u> Algorithms and Data Structures - <i>External</i> PREREQ: 6CP CP SUBJECTS	<u>CP3407</u> Advanced Software Engineering - <i>External</i> PREREQ: CP1404 OR CP1804 AND 18CP OF CP SUBJECTS
<u>CP2411</u> 3D Modelling and Animation - <i>External</i> PREREQ: 6CP CP SUBJECTS	
<u>CP3406</u> Mobile Computing PREREQ: CP1404	