

## RECOMMENDED STUDY PLAN

2021-2022

DEGREE Bachelor of Engineering (Honours) MAJOR Chemical Engineering (CEM)

NAME \_\_\_\_\_

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

	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>CH1002</u> Chemistry: Principles & Applications PREREQ: CH1001 OR CH1011
	Major Core: <u>CH1001</u> Chemistry: A Central Science PREREQ: CH1020 OR EG1010 OR SENIOR CHEMISTRY	Major Core: <u>CL2502</u> Chemical Engineering Thermodynamics PREREQ: CL2501 AND MA2000
	Major Core: <u>CL2501</u> Process Analysis PREREQ: EG1010	Major Core: <u>CS3008</u> Fluid Mechanics PREREQ: MA2000 AND ME2512
	Major Core: <u>ME2512</u> Thermofluid Mechanics PREREQ: EG1011	<u>List 1:</u>

	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>CH2103</u> Analytical Chemistry PREREQ: CH1001 OR CH1011
	Major Core: <u>CL3021</u> Mass Transfer Operations PREREQ: CL2501 AND MA2000	Major Core: <u>EE3600</u> Automatic Control 1 PREREQ: EG1012 AND MA2000
	Major Core: <u>CL3030</u> Reactor Design PREREQ: CL2501 AND MA2000	Major Core: <u>ME3512</u> Heat and Mass Transfer PREREQ: MA2000
	<u>List 1:</u>	Major Core: <u>CL4538</u> Bioprocess Engineering PREREQ: CL2502 OR CL3010 AND CL3021 AND CL3030

<b>Year 4</b>	<b>Study Period 1 - SP1</b>	<b>Study Period 2 - SP2</b>
	<b>Degree Core:</b> <u>EG4011</u> Thesis Part 1 of 2 <b>PREREQ:</b> 72CP	<b>Degree Core:</b> <u>EG4012</u> Thesis Part 2 of 2 <b>PREREQ:</b> EG4011
	<b>Major Core:</b> <u>CL4040</u> Safety, Environment and Sustainability in the Process Industries <b>PREREQ:</b> 48CP	<b>Major Core:</b> <u>CL4537</u> Minerals and Solids Processing <b>PREREQ:</b> 48CP
	<b>Major Core:</b> <u>CL4071</u> Chemical Engineering Design (Part 1 of 2) <b>PREREQ:</b> CL3010 AND CL3021 AND CL3030 AND CL4538 AND CS3008 AND ME3512	<b>Major Core:</b> <u>CL4072</u> Chemical Engineering Design (Part 2 of 2) <b>PREREQ:</b> CL4071
	<b>List 1:</b>	<b>List 1:</b>

**Further Degree Options:**

<b>List 1:</b>	
<b>Study Period 1 – SP1</b>	<b>Study Period 2 – SP2</b>
<u>CL2501</u> Process Analysis – <i>TSV ONLY</i> <i>Subject is CORE in Major</i> <b>PREREQ:</b> EG1010	<u>EA1110</u> Evolution of the Earth
<u>CS2001</u> Engineering Strength of Materials <b>PREREQ:</b> EG1011	<u>EG2010</u> Materials Science and Engineering – <i>TSV only</i>
<u>EV2301</u> Urban Geography and Design <b>PREREQ:</b> 12CP LEVEL 1 SUBJECTS	<u>EV2502</u> Introduction to Geographic Information Systems <b>PREREQ:</b> 12CP LEVEL 1 SUBJECTS
<u>MA2211</u> - Discrete Mathematics – <i>TSV ONLY</i> <b>PREREQ:</b> MATHS B	<u>CC2511</u> – Embedded Systems Design <b>PREREQ:</b> EG1002 OR CP1300 OR CP1404
<u>PH2002</u> Classical Mechanics and Quantum Physics 1 <b>PREREQ:</b> MA1003 AND PH1005 AND (PH1006 OR PH1007 OR (EG1012 AND EG1011))	<u>CP2406</u> Programming III <b>PREREQ:</b> CP1404
<u>PH2019</u> Introduction to Electromagnetism Optics and Early Quantum <b>PREREQ:</b> (EG1012 OR PH1005) AND MA1003	<u>CS2004</u> Surveying and Construction – <i>TSV ONLY, offered ODD years only</i>
<u>EE3010</u> Digital Signal Processing <b>PREREQ:</b> 48CP	<u>MA2210</u> - Linear Algebra <b>PREREQ:</b> MA1003
<u>ME4521</u> Bulk Materials Handling – <i>TSV only, offered ODD years only</i> <b>PREREQ:</b> 48CP	<u>ME2525</u> Machine Element Design – <i>TSV ONLY</i> <b>PREREQ:</b> CS2001
	<u>PH2240</u> Atomic and Nuclear Physics – <i>TSV ONLY</i> <b>PREREQ:</b> PH2002 AND MA1003
	<u>CC3501</u> Computer Interfacing and Control <b>PREREQ:</b> CC2511
	<b>SP11 (Nov-Feb)</b>
	<u>EV3502</u> Advanced Geographic Information Systems – <i>TSV ONLY</i> <b>PREREQ:</b> AT LEAST 12CP LEVEL 2 INCLUDING EV2502
	<b>Trimester 3 (Sept-Dec)</b>
	<u>CP1404</u> Programming II <b>PREREQ:</b> CP1401 OR EG1002