

RECOMMENDED STUDY PLAN

2021-2022

DEGREE Bachelor of Engineering (Honours) MAJOR Civil Engineering (CVL)

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>CS2003</u> Introduction to Structural Design PREREQ: CS2001
	Major Core: <u>CS2001</u> Engineering Strength of Materials PREREQ: EG1011	Major Core: <u>CS2005</u> Introduction to Geotechnical Engineering PREREQ: EG1011
	Major Core: <u>CS2002</u> Catchment, Stream and Lake Engineering	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>CS3002</u> Soil Mechanics and Geology PREREQ: CS2005
	Major Core: <u>CS3000</u> Structural Analysis PREREQ: CS2003 AND MA2000	Major Core: <u>CS3003</u> Design of Steel and Concrete Structures PREREQ: CS2003 AND CS3000
	Major Core: <u>CS3001</u> Concrete Engineering PREREQ: CS2001	Major Core: <u>CS3004</u> Transportation Engineering – <i>only offered EVEN years *</i> PREREQ: 48CP
	<u>List 1:</u>	<u>List 1:</u>

Year 4	Study Period 1 - SP1	Study Period 2 - SP2
	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>CS4001</u> Foundation Engineering and Rock Mechanics PREREQ: CS3002	Major Core: <u>CS4005</u> Civil Engineering Design PREREQ: CS3001 AND CS3003 AND CS40001 AND CS4002
	Major Core: <u>CS4002</u> Hydraulic and Coastal Engineering PREREQ: CS3008	Major Core: <u>CS4008</u> Water and Wastewater Engineering PREREQ: 48CP INCLUDING CS2002 AND EG1010
	Major Core: <u>CS4010</u> Finite Element Analysis and Structural Dynamics PREREQ: EG1002 AND CS3000 AND MA2000	List 1:

Further Degree Options:

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