

## RECOMMENDED STUDY PLAN

2021-2022

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

NAME \_\_\_\_\_ MINOR Physics (PHY)

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>CS2003</u> Introduction to Structural Design PREREQ: CS2001
	<b>Major Core:</b> <u>CS2001</u> Engineering Strength of Materials PREREQ: EG1011	<b>Major Core:</b> <u>CS2005</u> Introduction to Geotechnical Engineering PREREQ: EG1011
	<b>Major Core:</b> <u>CS2002</u> Catchment, Stream and Lake Engineering	<b>Major Core:</b> <u>CS3008</u> Fluid Mechanics PREREQ: MA2000 AND ME2512
	<b>Major Core:</b> <u>ME2512</u> Thermofluid Mechanics PREREQ: EG1011	<b>Minor core list 1:</b>

	Study Period 1 - SP1	Study Period 2 - SP2
Year 3	<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>CS3002</u> Soil Mechanics and Geology PREREQ: CS2005
	<b>Major Core:</b> <u>CS3000</u> Structural Analysis PREREQ: CS2003 AND MA2000	<b>Major Core:</b> <u>CS3003</u> Design of Steel and Concrete Structures PREREQ: CS2003 AND CS3000
	<b>Major Core:</b> <u>CS3001</u> Concrete Engineering PREREQ: CS2001	<b>Major Core:</b> <u>CS3004</u> Transportation Engineering – <i>only offered EVEN years *</i> PREREQ: 48CP
	<b>Minor Core:</b> <u>PH2002</u> Classical Mechanics and Quantum Physics 1 PREREQ: MA1003 AND PH1005 AND (PH1006 OR PH1007 OR (EG1012 AND EG1011))	<b>Minor core List 1 or 2:</b>

<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 PREREQ: 72CP	<b>Degree Core:</b> <u>EG4012</u> Thesis Part 2 of 2 PREREQ: EG4011
	<b>Major Core:</b> <u>CS4001</u> Foundation Engineering and Rock Mechanics PREREQ: CS3002	<b>Major Core:</b> <u>CS4005</u> Civil Engineering Design PREREQ: CS3001 AND CS3003 AND CS40001 AND CS4002
	<b>Major Core:</b> <u>CS4002</u> Hydraulic and Coastal Engineering PREREQ: CS3008	<b>Major Core:</b> <u>CS4008</u> Water and Wastewater Engineering PREREQ: 48CP INCLUDING CS2002 AND EG1010
	<b>Major Core:</b> <u>CS4010</u> Finite Element Analysis and Structural Dynamics PREREQ: EG1002 AND CS3000 AND MA2000	<b>Minor core List 1 or 2:</b>

**Further Degree Options: Select 1 Subject from List 1 AND 2 subjects from List 1 OR List 2**

<b>Minor Core List 1:</b>	
Study Period 1 – SP1	Study Period 2 – SP2
<u>PH2019</u> Introduction to Electromagnetism Optics and Early Quantum PREREQ: (EG1012 OR PH1005) AND MA1003	<u>PH2240</u> Atomic and Nuclear Physics PREREQ: PH2002 AND MA1003
<u>PH3008</u> Statistical Mechanics and Transport PREREQ: PH2019 AND PH2002 AND MA2000	

<b>Minor Core List 2:</b>	
Study Period 1 – SP1	Study Period 2 – SP2
<u>PH3019</u> Electromagnetic Phenomena PREREQ: MA2000 AND PH2019	<u>PH3002</u> Quantum Physics 2 PREREQ: MA2000 AND PH2002
<u>MA3211</u> Mathematical Modelling and Differential Equations PREREQ: MA2000 AND (MA2210 OR MA2201)	<u>PH3006</u> Oceanography and Meteorology PREREQ: MA2000 AND PH2019
	<u>MA2210</u> Linear Algebra PREREQ: MA1003