

RECOMMENDED STUDY PLAN

2022

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

NAME _____ MAJOR Civil Engineering (CVL)

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: EG1000 Engineering 1	Degree Core: EG1010 Process Engineering
	Degree Core: EG1002 Computing and Sensors	Degree Core: EG1011 Statics and Dynamics PREREQ: PH1005 OR (PHYSICS AND MATHS C)
	Degree Core: MA1000 Mathematical Foundations PREREQ: MA1020 OR MATHS B OR MATHS C	Degree Core: EG1012 Electric Circuits
	Degree Core: PH1005 Advanced Stream Physics 1 PREREQ: MATHS B OR MA1020 OR MA1000 OR MA1008	Degree Core: MA1003 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: MA2000 Mathematics for Scientists and Engineers PREREQ: MA1003	Major Core: CS2003 Introduction to Structural Design PREREQ: CS2001
	Major Core: CS2001 Engineering Strength of Materials PREREQ: EG1011	Major Core: CS2005 Introduction to Geotechnical Engineering PREREQ: EG1011
	Major Core: ME2512 Thermofluid Mechanics PREREQ: EG1011	
Trimester 1 (Feb-May)		Trimester 3 (Sept-Dec)
Degree Core: CP1402 Internet Fundamentals		Degree Core: CP1403 Design Thinking
		Degree Core: CP1404 Programming II PREREQ: CP1401 OR EG1002

	Study Period 1 - SP1	Study Period 2 - SP2
Year 3	Major Core: <u>CS2002</u> Catchment, Stream and Lake Engineering	Major Core: <u>CS3002</u> Soil Mechanics and Geology PREREQ: CS2005
	List Options: see tables below for details	Major Core: <u>CS3008</u> Fluid Mechanics PREREQ: MA2000 AND ME2512
		Trimester 3 (Sept-Dec)
		Degree Core: <u>CP2404</u> Database Modelling
Trimester TBA		
List Options: see tables below for details	Degree Core: <u>CP2406</u> Programming III PREREQ: CP1404	Degree Core: <u>CP3407</u> Advanced Software Engineering PREREQ: CP1404 AND 18CP OF SUBJECTS

	Study Period 1 - SP1	Study Period 2 - SP2
Year 4	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>CS3003</u> Design of Steel and Concrete Structures PREREQ: CS2003 AND CS3000
	Major Core: <u>CS3000</u> Structural Analysis PREREQ: CS2003 AND MA2000	Major Core: <u>CS3004</u> Transportation Engineering – <i>only offered EVEN years *</i> PREREQ: 48CP
	Major Core: <u>CS3001</u> Concrete Engineering PREREQ: CS2001	
Trimester TBA		
List Options: see tables below for details	List Options: see tables below for details	List Options: see tables below for details

**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>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 Options: see tables below for details

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)
<u>CP1406</u> Web Design and Development	<u>CP1407</u> Introductory Machine Learning and Data Science	
Trimester TBA		
<u>CP2410</u> Algorithms and Data Structures PREREQ: 6CP OF CP SUBJECTS	<u>CP2405</u> Collective Intelligence and Entrepreneurship PREREQ: 24CP	<u>CP2409</u> Network Forensics and Data Communications PREREQ: CP1402
<u>CP2411</u> 3D Modelling and Animation PREREQ: 6CP OF CP SUBJECTS	<u>CP2408</u> Design Thinking and Creative IT Industries PREREQ: CP1403	<u>CP2412</u> Game Design and Technologies PREREQ: 6CP OF CP SUBJECTS

List 2: Select 3 subjects		
Trimester TBA		
<u>CP3402</u> Content Management Systems PREREQ: (CP1404 OR CP1804 AND CP1406 OR CP1806) OR CP2010, AND 24CP OF CP SUBJECTS	<u>CP3404</u> Information Security PREREQ: 18CP OF SUBJECTS, INCLUDING CP1402	<u>CP3406</u> Mobile Computing PREREQ: CP1404 OR CP1804
<u>CP3403</u> Data Mining PREREQ: (CP2403 AND CP2404) OR (18 CREDIT POINTS OF UNDERGRADUATE SUBJECTS INCLUDING 6 CREDIT POINTS OF CP SUBJECTS)	<u>CP3405</u> Design Thinking and Project Management PREREQ: CP2408	<u>CP3408</u> Game Engine and Simulation PREREQ: (CP1404 OR CP1804) AND 18 CP OF CP SUBJECTS