Engineering

Bachelor of Engineering (Honours) / Computer Science (3785)

Civil Engineering (CVENAH) / Computer Science (COMPA1)

T1 Entry 2025 Sample Plan



	Year 1
Term 1	COMP1511 Programming Fundamentals
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A
Term 2	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B
	COMP1521 Computer Systems Fundamentals
	COMP1531 Software Engineering Fundamentals
Term 3	ENGG1300 Engineering Mechanics
	DESN1000 Introduction to Engineering Design and Innovation

	Year 2
Term 1	COMP2521 Data Structures and Algorithms
	MATH2018 Engineering Mathematics 2D <u>OR</u> MATH2019 Engineering Mathematics 2E
	ENGG2400 Mechanics of Solids 1
Term 2	MATS1101 Engineering Materials and Chemistry
	DESN2000 Engineering Design and Professional Practice
	Computing Elective
Term 3	ENGG2500 Fluid Mechanics for Engineers
	COMP2511 Object-Oriented Design and Programming

	Year 3
	COMP3121 Algorithm Design and Analysis <u>OR</u> COMP3821 Extended Algorithm Design and Analysis
Term 1	COMP3900 Computer Science Project
Term 2	CVEN2002 Civil and Environmental Engineering Computations
	CVEN2101 Engineering Construction
	CVEN2303 Structural Analysis and Modelling
Term 3	CVEN3101 Engineering Operations and Control
	CVEN3202 Soil Mechanics
	COMP4920 Professional Issues and Ethics in Information Technology

	Year 4	
	CVEN3203 Applied Geotechnics and Engineering Geology	
Term 1	CVEN3303 Steel Structures	Те
	CVEN3501 Water Resources Engineering	
	CVEN3304 Concrete Structures	
Term 2	CVEN3401 Sustainable Transport and Highway Engineering	Te
	CVEN3502 Water and Wastewater Engineering	
	Discipline Elective	
Term 3	Discipline Elective	Te

	Year 5
	CVEN4050 Thesis A
Term 1	Computing Elective
	Computing Elective
	CVEN4051 Thesis B
Term 2	Discipline Elective
	Computing Elective
	Computing Elective
Term 3	Computing Elective

NOTES

This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.

Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999

Students can take alternative thesis options with school approval. Please see the Handbook for available options and adjust study plan accordingly.

Engineering

Bachelor of Engineering (Honours) / Computer Science (3785)

Civil Engineering (CVENAH) / Computer Science (COMPA1)

T2 Entry 2025 Sample Plan



	Year 1
	COMP1511 Programming Fundamentals
Term 2	MATH1131 ① Mathematics 1 A
	PHYS1121 Physics 1A OR PHYS1131 Higher Physics 1A
	ENGG1300 Engineering Mechanics
Term 3	MATS1101 Engineering Materials and Chemistry
	COMP1521 Computer Systems Fundamentals
Term 1	COMP1531 Software Engineering Fundamentals
	DESN1000 Introduction to Engineering Design and Innovation

	Year 2
Term 2	DESN2000 Engineering Design and Professional Practice
	MATH1231 Mathematics 1B OR MATH1241 Higher Mathematics 1B
	ENGG2400 Mechanics of Solids 1
Term 3	COMP2521 Data Structures and Algorithms
	Discipline Elective
Term 1	MATH2018 Engineering Mathematics 2D <u>OR</u> MATH2019 Engineering Mathematics 2E
	ENGG2500 Fluid Mechanics for Engineers
	COMP2511 Object-Oriented Design and Programming

	Year 3
	CVEN2002 Civil and Environmental Engineering Computations
Term 2	CVEN2101 Engineering Construction
	CVEN2303 Structural Analysis and Modelling
	CVEN3101 Engineering Operations and Control
Term 3	CVEN3202 Soil Mechanics
Term 1	COMP3121 Algorithm Design and Analysis OR COMP3821 Extended Algorithm Design and Analysis
	COMP3900 Computer Science Project
	CVEN3203 Applied Geotechnics and Engineering Geology

	Year 4	
	CVEN3304 Concrete Structures	
Term 2	CVEN3401 Sustainable Transport and Highway Engineering	
	CVEN3502 Water and Wastewater Engineering	
Term 3	COMP4920 Professional Issues and Ethics in Information Technology	
	Discipline Elective	
Term 1	CVEN4050@ Thesis A	
	CVEN3303 Steel Structures	
	CVEN3501 Water Resources Engineering	

	Year 5
	CVEN4051 Thesis B
Term 2	Computing Elective
	Discipline Elective
	Discipline Elective
Term 3	Computing Elective
	Computing Elective
	Computing Elective
Term 1	Computing Elective

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Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999

①Students can take MATH1131 or MATH1141 depending on term offerings. ②Students can take alternative thesis options with school approval. Please see the Handbook for available options and adjust study plan accordingly.

Engineering

Bachelor of Engineering (Honours) / Computer Science (3785)

Civil Engineering (CVENAH) / Computer Science (COMPA1)

T3 Entry 2025 Sample Plan



Year 1	
Term 3	COMP1511 Programming Fundamentals
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B
Term 1	COMP1531 Software Engineering Fundamentals
	DESN1000 Introduction to Engineering Design and Innovation
Term 2	COMP1521 Computer Systems Fundamentals
	ENGG1300 Engineering Mechanics

	Year 2
	COMP2521 Data Structures and Algorithms
Term 3	MATS1101 Engineering Materials and Chemistry
Term 1	COMP2511 Object-Oriented Design and Programming
	MATH2018 Engineering Mathematics 2D <u>OR</u> MATH2019 Engineering Mathematics 2E
	ENGG2400 Mechanics of Solids 1
Term 2	CVEN2002 Civil and Environmental Engineering Computations
	CVEN2101 Engineering Construction
	DESN2000 Engineering Design and Professional Practice

Term 3 CVEN3101 Engineering Operations and Control CVEN3202 Soil Mechanics COMP3900 Computer Science Project Term 1 CVEN3501 Water Resources Engineering CVEN2303 Structural Analysis and Modelling Term 2 CVEN3304 Concrete Structures	Year 3		
3 Engineering Operations and Control CVEN3202 Soil Mechanics COMP3900 Computer Science Project Term 1 CVEN3501 Water Resources Engineering CVEN2303 Structural Analysis and Modelling Term CVEN3304			
COMP3900 Computer Science Project Term 1			
Term 1 CVEN3501 Water Resources Engineering CVEN2303 Structural Analysis and Modelling Term CVEN3304			
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Structural Analysis and Modelling Term CVEN3304			
Structural Analysis and Modelling Term CVEN3304			
CVEN3401 Sustainable Transport and Highway Engineering			

	Year 4
Term 3	COMP4920 Professional Issues and Ethics in Information Technology
	Computing Elective
	Discipline Elective
Term 1	COMP3121 Algorithm Design and Analysis <u>OR</u> COMP3821 Extended Algorithm Design and Analysis
	CVEN3303 Steel Structures
	CVEN3203 Applied Geotechnics and Engineering Geology
Term 2	CVEN3502 Water and Wastewater Engineering
	Discipline Elective

	Year 5
Term 3	Computing Elective
	Discipline Elective
Term 1	CVEN4050 Thesis A
	Computing Elective
	Computing Elective
Term 2	CVEN4051 Thesis B
	Discipline Elective
	Computing Elective

NOTES

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Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999

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