Engineering

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

Mechanical Engineering (MECHAH) / Computer Science (COMPA1)

T1 Entry 2025 Sample Plan

	Year 1	Year 2	Year 3	Year 4	Year 5
Term 1	**COMP1511** Programming Fundamentals	**COMP1521** Computer Systems Fundamentals	**COMP2511** Object-Oriented Design and Programming	**MMAN3400** Mechanics of Solids 2	**MMAN4951** Research Thesis A
	MATH1131 Mathematics 1A OR **MATH1141** Higher Mathematics 1A	**MATH2018** Engineering Mathematics 2D OR **MATH2019** Engineering Mathematics 2E	**MMAN2700** Thermodynamics	**COMP3121** Algorithm Design and Analysis OR **COMP3821** Extended Algorithm Design and Analysis	**Computing Elective**
	PHYS1121 Physics 1A OR **PHYS1131** Higher Physics 1A	**ENGG2400** Mechanics of Solids 1	**MECH3110** Mechanical Design 1	**Recommended Discipline Elective**	**Recommended Discipline Elective**
Term 2	**MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B	**COMP2521** Data Structures and Algorithms	**DESN3000** Strategic Design Innovation	**MECH4100** Mechanical Design 2	**MMAN4952** Research Thesis B
	COMP1531 Software Engineering Fundamentals	**MMAN1130** Design and Manufacturing	**MECH3610** Advanced Thermofluids	**Discipline Elective**	**Computing Elective**
			MMAN3200 Linear Systems and Control	**Computing Elective**	**Computing Elective**
Term 3	**DESN1000** Introduction to Engineering Design and Innovation	**ENGG2500** Fluid Mechanics for Engineers	**COMP3900** Computer Science Project	**COMP4920** Professional Issues and Ethics in Information Technology	**MMAN4953** Research Thesis C
	ELEC1111 Electrical Circuit Fundamentals	**DESN2000** Engineering Design and Professional Practice	**MATH2089** Numerical Methods and Statistics	**Discipline Elective**	**Computing Elective**
	ENGG1300 Engineering Mechanics	**MMAN2300** Engineering Mechanics 2			**Recommended Discipline 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

At least 18 UOC of discipline electives must be chosen from the “Recommended Discipline Elective:” list in the handbook.

Engineering

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

Mechanical Engineering (MECHAH) / Computer Science (COMPA1)

T2 Entry 2025 Sample Plan

Year 1	
Term 2	**COMP1511** Programming Fundamentals
	ENGG1300 Engineering Mechanics
Term 3	**MATH1131** Mathematics 1A OR **MATH1141** Higher Mathematics 1A
	PHYS1121 Physics 1A OR **PHYS1131** Higher Physics 1A
	ELEC1111 Electrical Circuit Fundamentals
Term 1	**COMP1531** Software Engineering Fundamentals
	DESN1000 Introduction to Engineering Design and Innovation
	MATH1231 Mathematics 1B OR **MATH1241** Higher Mathematics 1B

Year 2	
Term 2	**COMP1521** Computer Systems Fundamentals
	MMAN1130 Design and Manufacturing
Term 3	**COMP2521** Data Structures and Algorithms
	ENGG2500 Fluid Mechanics for Engineers
	DESN2000 Engineering Design and Professional Practice
Term 1	**MATH2018** Engineering Mathematics 2D OR **MATH2019** Engineering Mathematics 2E
	ENGG2400 Mechanics of Solids 1
	COMP2511 Object-Oriented Design and Programming

Year 3	
Term 2	**MMAN3200** Linear Systems and Control
	DESN3000 Strategic Design Innovation
	MECH3610 Advanced Thermofluids
Term 3	**MMAN2700** Thermodynamics
	MATH2089 Numerical Methods and Statistics
Term 1	**COMP3121** Algorithm Design and Analysis OR **COMP3821** Extended Algorithm Design and Analysis
	COMP3900 Computer Science Project
	MECH3110 Mechanical Design 1

Year 4	
Term 2	**MMAN3200** Linear Systems and Control
	MECH4100 Mechanical Design 2
	Recommended Discipline Elective
Term 3	**Computing Elective**
	Recommended Discipline Elective
Term 1	**MMAN3400** Mechanics of Solids 2
	COMP4920 Professional Issues and Ethics in Information Technology
	Computing Elective

Year 5	
Term 2	**MMAN4951** Research Thesis A
	Computing Elective
	Recommended Discipline Elective
Term 3	**MMAN4952** Research Thesis B
	Computing Elective
	Computing Elective
Term 1	**MMAN4953** Research Thesis C
	Computing Elective
	Discipline Elective

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Engineering

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

Mechanical Engineering (MECHAH) / Computer Science (COMPA1)

T3 Entry 2025 Sample Plan

	Year 1	Year 2	Year 3	Year 4	Year 5
Term 3	**COMP1511** Programming Fundamentals	**MMAN1130** Design and Manufacturing	**ENGG2500** Fluid Mechanics for Engineers	**COMP3900** Computer Science Project	**MMAN4951** Research Thesis A
	DESN1000 Introduction to Engineering Design and Innovation	**ENGG1300** Engineering Mechanics	**DESN2000** Engineering Design and Professional Practice	**COMP3121** Algorithm Design and Analysis OR **COMP3821** Extended Algorithm Design and Analysis	**Computing Elective**
	ELEC1111 Electrical Circuit Fundamentals		**MMAN2700** Thermodynamics	**Recommended Discipline Elective**	**Recommended Discipline Elective**
Term 1	**MATH1131** Mathematics 1A OR **MATH1141** Higher Mathematics 1A	**MATH2018** Engineering Mathematics 2D OR **MATH2019** Engineering Mathematics 2E	**MECH3110** Mechanical Design 1	**MMAN3400** Mechanics of Solids 2	**MMAN4952** Research Thesis B
	PHYS1121 Physics 1A OR **PHYS1131** Higher Physics 1A	**COMP2521** Data Structures and Algorithms	**MATH2089** Numerical Methods and Statistics	**Recommended Discipline Elective**	**Computing Elective**
	COMP1521 Computer Systems Fundamentals	**ENGG2400** Mechanics of Solids 1			**Computing Elective**
Term 2	**MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B	**COMP2511** Object-Oriented Design and Programming	**MECH3610** Advanced Thermofluids	**MECH4100** Mechanical Design 2	**MMAN4953** Research Thesis C
	COMP1531 Software Engineering Fundamentals	**MMAN2300** Engineering Mechanics 2	**MMAN3200** Linear Systems and Control	**COMP4920** Professional Issues and Ethics in Information Technology	**Computing Elective**
		Discipline Elective	**DESN3000** Strategic Design Innovation	**Computing Elective**	**Discipline Elective**

NOTES

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

At least 18 UOC of discipline electives must be chosen from the “Recommended Discipline Elective:” list in the handbook.