Engineering

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

Electrical Engineering (ELECAH) / Computer Science (COMPA1) T1 Entry 2024 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
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B
Term 2	PHYS1231 Higher Physics 1B
	COMP1521 Computer Systems Fundamentals
Term 3	DESN 1000 Introduction to Engineering Design and Innovation
	ELEC1111 Electrical Circuit Fundamentals

	Year 2	
Term 1	ELEC2134 Circuits and Signals	
	COMP1531 Software Engineering Fundamentals	
	ELEC2141 Digital Circuit Design	
Term 2	DESN2000 Engineering Design and Professional Practice	
	COMP2521 Data Structures and Algorithms	
	ELEC2133 Analogue Electronics	
Term 3	COMP2511 Object-Oriented Design and Programming	
	MATH2069 Mathematics 2A	

	Year 3
Term 1	COMP3121 Algorithm Design and Analysis <u>OR</u> COMP3821 Extended Algorithm Design and Analysis
	ELEC3106 Electronics
	ELEC3115 Electromagnetic Engineering
	MATH2099 Mathematics 2B
Term 2	ELEC3105 Electrical Energy
	ELEC3117 Electrical Engineering Design
Term 3	COMP3900 Computer Science Project
	ELEC3104 Digital Signal Processing

	Year 4	
Term 1	TELE3113 Analogue and Digital Communications	
	ELEC4122 Strategic Leadership and Ethics	
	COMP4920 Professional Issues and Ethics in Information Technology	
Term 2	ELEC3114 Control Systems	
	Disciplinary Elective	
Term 3	ELEC4123 Electrical Design Proficiency	
	Disciplinary Elective	
	Disciplinary / Breadth Elective	

	Year 5
	ELEC4951 Research Thesis A
Term 1	Computing Elective
	Computing Elective
	ELEC4952 Research Thesis B
Term 2	Computing Elective
	Computing Elective
Term 3	ELEC4953 Research Thesis C
	Computing Elective
	Disciplinary Elective

NOTES

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

Engineering

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

Electrical Engineering (ELECAH) / Computer Science (COMPA1) T2 Entry 2024 Sample Plan



	Year1
Term 2	COMP1511 Programming Fundamentals
	MATH1131 ① Mathematics 1A
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B
Term 3	COMP1531 Software Engineering Fundamentals
	PHYS1231 Higher Physics 1B
	COMP1521 Computer Systems Fundamentals
Term 1	DESN1000 Introduction to Engineering Design and Innovation

	Year 2
	COMP2521 Data Structures and Algorithms
Term 2	DESN2000 Engineering Design and Professional Practice
	MATH2069 Mathematics 2A
Term 3	COMP2511 Object-Oriented Design and Programming
	Disciplinary / Breadth Elective
Term 1	ELEC3115 Electromagnetic Engineering
	ELEC1111 Electrical Circuit Fundamentals
	ELEC2141 Digital Circuit Design

	Year 3
	MATH2099 Mathematics 2B
Term 2	Disciplinary Elective
Term 3	COMP4920 Professional Issues and Ethics in Information Technology
	ELEC2134 Circuits and Signals
	Computing Elective
Term 1	COMP3121 Algorithm Design and Analysis <u>OR</u> COMP3821 Extended Algorithm Design and Analysis
	COMP3900 Computer Science Project
	ELEC3115 Electromagnetic Engineering

	Year 4
	ELEC3105 Electrical Energy
Term 2	ELEC3114 Control Systems
	ELEC3117 Electrical Engineering Design
	ELEC3104 Digital Signal Processing
Term 3	ELEC4123 Electrical Design Proficiency
	ELEC3106 Electronics
Term 1	TELE3113 Analogue and Digital Communications
	ELEC4122 Strategic Leadership and Ethics

	Year 5
Term 2	ELEC4951 Research Thesis A
	Disciplinary Elective
	Computing Elective
	ELEC4952 Research Thesis B
Term 3	Computing Elective
	Computing Elective
Term 1	ELEC4953 Research Thesis C
	Computing Elective
	Disciplinary Elective

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①Students can take MATH1131 or MATH1141 depending on term offerings

Engineering

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

Electrical Engineering (ELECAH) / Computer Science (COMPA1) T3 Entry 2024 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
Term 1	DESN 1000 Introduction to Engineering Design and Innovation
	ELEC1111 Electrical Circuit Fundamentals
	ELEC2141 Digital Circuit Design
Term 2	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B
	PHYS1231 Higher Physics 1B

	Year 2	
Term 3	MATH2069 Mathematics 2A	
	COMP1521 Computer Systems Fundamentals	
	COMP1531 Software Engineering Fundamentals	
Term 1	ELEC2134 Circuits and Signals	
	ELEC3115 Electromagnetic Engineering	
Term 2	DESN2000 Engineering Design and Professional Practice	
	ELEC2133 Analogue Electronics	
	MATH2099 Mathematics 2B	

Year 3		
Term 3	COMP2521 Data Structures and Algorithms	
	ELEC3104 Digital Signal Processing	
Term 1	ELEC3106 Electronics	
	TELE3113 Analogue and Digital Communications	
	COMP2511 Object-Oriented Design and Programming	
Term 2	COMP3121 Algorithm Design and Analysis OR COMP3821 Extended Algorithm Design and Analysis	
	ELEC3105 Electrical Energy	
	ELEC3114 Control Systems	

	Year 4	
Term 3	ELEC4123 Electrical Design Proficiency	
	COMP4920 Professional Issues and Ethics in Information Technology	
Term 1	COMP3900 Computer Science Project	
	ELEC4122 Strategic Leadership and Ethics	
	Disciplinary Elective	
Term 2	ELEC3117 Electrical Engineering Design	
	Disciplinary / Breadth Elective	
	Computing Elective	

Year 5			
Term 3	ELEC4951 Research Thesis A		
	Disciplinary Elective		
	Disciplinary Elective		
Term 1	ELEC4952 Research Thesis B		
	Computing Elective		
	Computing Elective		
Term 2	ELEC4953 Research Thesis C		
	Computing Elective		
	Computing Elective		

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