Engineering

Bachelor of Engineering (Honours) / Science (3767)

Electrical Engineering (ELECAH) / Physics (PHYSL1)

T1 Entry 2025 Sample Plan

Year 1	
Term 1	**ELEC1111** Electrical Circuit Fundamentals
	MATH1131 Mathematics 1A OR **MATH1141** Higher Mathematics 1A
	PHYS1121 Physics 1A OR **PHYS1131** Higher Physics 1A
	SCIF0000 (0 UoC) Introduction to University
Term 2	**MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B
	PHYS1231 Higher Physics 1B
Term 3	**DESN1000** Introduction to Engineering Design and Innovation
	MATH2069 Mathematics 2A
	COMP1511 Programming Fundamentals

Year 2	
Term 1	**ELEC2134** Circuits and Signals
	ELEC2141 Digital Circuit Design
	PHYS2111 Quantum Physics
Term 2	**DESN2000** Engineering Design and Professional Practice
	PHYS2114 Electromagnetism
	ELEC2133 Analogue Electronics
Term 3	**COMP1521** Computer Systems Fundamentals
	Employability Experience Course

Year 3	
Term 1	**ELEC3106** Electronics
	ELEC3115 Electromagnetic Engineering
	MATH2301 Mathematical Computing
Term 2	**MATH2099** Mathematics 2B
	ELEC3105 Electrical Energy
	ELEC3117 Electrical Engineering Design
Term 3	**ELEC3104** Digital Signal Processing
	SCIF1000 Skills in Science

Year 4	
Term 1	**TELE3113** Analogue and Digital Communications
	ELEC4122 Strategic Leadership and Ethics
Term 2	**ELEC3114** Control Systems
	PHYS3111 Quantum Mechanics
	Discipline Elective
Term 3	**ELEC4123** Electrical Design Proficiency
	Discipline Elective
	Disciplinary / Breadth Elective

Year 5	
Term 1	**ELEC4951** Research Thesis A
	PHYS3112 Experimental and Computational Physics
	PHYS3113 Thermal Physics and Statistical Mechanics
Term 2	**ELEC4952** Research Thesis B
	Employability Experience Course
	Physics Elective
Term 3	**ELEC4953** Research Thesis C
	Science Elective
	Physics Elective
	SCIF3010 (0 UoC) Graduation Portfolio

NOTES

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

Engineering

Bachelor of Engineering (Honours) / Science (3767)

Electrical Engineering (ELECAH) / Physics (PHYSL1)

T2 Entry 2025 Sample Plan

	Year 1	Year 2	Year 3	Year 4	Year 5
Term 2	**MATH1131**① Mathematics 1A	**DESN2000** Engineering Design and Professional Practice	**MATH2099** Mathematics 2B	**ELEC3105** Electrical Energy	**ELEC4951** Research Thesis A
	PHYS1121 Physics 1A OR **PHYS1131** Higher Physics 1A	**COMP1521** Computer Systems Fundamentals	**PHYS2114** Electromagnetism	**ELEC3114** Control Systems	**PHYS3111** Quantum Mechanics
	SCIF0000 (0 UoC) Introduction to University		**ELEC2133** Analogue Electronics	**ELEC3117** Electrical Engineering Design	**Employability Experience Course**
Term 3	**MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B	**MATH2069** Mathematics 2A	**Employability Experience Course**	**ELEC3104** Digital Signal Processing	**ELEC4952** Research Thesis B
	PHYS1231 Higher Physics 1B	**SCIF1000** Skills in Science	**Discipline Elective**	**ELEC4123** Electrical Design Proficiency	**Discipline Elective**
	COMP1511 Programming Fundamentals	**ELEC2134** Circuits and Signals			**Disciplinary / Breadth Elective**
Term 1	**ELEC1111** Electrical Circuit Fundamentals	**MATH2301** Mathematical Computing	**ELEC3115** Electromagnetic Engineering	**ELEC3106** Electronics	**ELEC4953** Research Thesis C
	DESN1000 Introduction to Engineering Design and Innovation	**PHYS2111** Quantum Physics	**Physics Elective**	**TELE3113** Analogue and Digital Communications	**PHYS3112** Experimental and Computational Physics
	ELEC2141 Digital Circuit Design	**Physics Elective**	**Science Elective**	**ELEC4122** Strategic Leadership and Ethics	**PHYS3113** Thermal Physics and Statistical Mechanics
					SCIF3010 (0 UoC) Graduation Portfolio

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Engineering

Bachelor of Engineering (Honours) / Science (3767)

Electrical Engineering (ELECAH) / Physics (PHYSL1)

T3 Entry 2025 Sample Plan

Year 1	
Term 3	**COMP1511** Programming Fundamentals
	MATH1131 Mathematics 1A OR **MATH1141** Higher Mathematics 1A
	PHYS1121 Physics 1A OR **PHYS1131** Higher Physics 1A
	SCIF0000 (0 UoC) Introduction to University
Term 1	**DESN1000** Introduction to Engineering Design and Innovation
	ELEC1111 Electrical Circuit Fundamentals
	ELEC2141 Digital Circuit Design
Term 2	**MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B
	PHYS1231 Higher Physics 1B

Year 2	
Term 3	**MATH2069** Mathematics 2A
	COMP1521 Computer Systems Fundamentals
Term 1	**ELEC2134** Circuits and Signals
	ELEC3115 Electromagnetic Engineering
	MATH2301 Mathematical Computing
Term 2	**DESN2000** Engineering Design and Professional Practice
	ELEC2133 Analogue Electronics
	MATH2099 Mathematics 2B

Year 3	
Term 3	**ELEC3104** Digital Signal Processing
	SCIF1000 Skills in Science
Term 1	**ELEC3106** Electronics
	TELE3113 Analogue and Digital Communications
	PHYS2111 Quantum Physics
Term 2	**PHYS2114** Electromagnetism
	ELEC3105 Electrical Energy
	ELEC3114 Control Systems

Year 4	
Term 3	**ELEC4123** Electrical Design Proficiency
	Employability Experience Course
Term 1	**ELEC4122** Strategic Leadership and Ethics
	Science Elective
	Disciplinary / Breadth Elective
Term 2	**ELEC3117** Electrical Engineering Design
	PHYS3111 Quantum Mechanics
	Physics Elective

Year 5	
Term 3	**ELEC4951** Research Thesis A
	Discipline Elective
	Discipline Elective
Term 1	**ELEC4952** Research Thesis B
	PHYS3112 Experimental and Computational Physics
	PHYS3113 Thermal Physics and Statistical Mechanics
Term 2	**ELEC4953** Research Thesis C
	Physics Elective
	Employability Experience Course
	SCIF3010 (0 UoC) Graduation Portfolio

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