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 <u>OR</u> MATH1141 Higher Mathematics 1A
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A
	SCIF0000 (0 UoC) Introduction to University
Term 2	MATH1231 Mathematics 1B <u>OR</u> 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	MATH2089 Numerical Methods and Statistics	
	COMP1521 Computer Systems Fundamentals	

	Year 3
Term 1	ELEC3106 Electronics
	ELEC3115 Electromagnetic Engineering
	Employability Experience Course
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
	ELEC4951 Research Thesis A
Term 1	PHYS3112 Experimental and Computational Physics
	PHYS3113 Thermal Physics and Statistical Mechanics
Term 2	ELEC4952 Research Thesis B
. •	Employability Experience Course
	Physics Elective
	FLEC4953
	Research Thesis C
Term 3	Science Elective
	Physics Elective
	SCIF3010 (0 UoC) Graduation Portfolio

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

Engineering

Bachelor of Engineering (Honours) / Science (3767)

Electrical Engineering (ELECAH) / Physics (PHYSL1)

T2 Entry 2025 Sample Plan



	Year 1
Term 2	MATH1131① Mathematics 1A
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A
	SCIF0000 (0 UoC) Introduction to University
Term 3	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B
	PHYS1231 Higher Physics 1B
	COMP1511 Programming Fundamentals
Term 1	ELEC1111 Electrical Circuit Fundamentals
	DESN1000 Introduction to Engineering Design and Innovation
	ELEC2141 Digital Circuit Design

	Year 2
Term 2	DESN2000 Engineering Design and Professional Practice
	COMP1521 Computer Systems Fundamentals
	MATH2069
	Mathematics 2A
Term	SCIF1000
3	Skills in Science
	ELEC2134
	Circuits and Signals
	MATH2089
	Numerical Methods and Statistics
Term 1	PHYS2111
	Quantum Physics
	Physics Elective

	Year 3
Term 2	MATH2099 Mathematics 2B
	PHYS2114 Electromagnetism
	ELEC2133 Analogue Electronics
Term 3	Employability Experience Course
	Discipline Elective
Term 1	ELEC3115 Electromagnetic Engineering
	Physics Elective
	Science Elective

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

	Vacus F
	Year 5
	ELEC4951 Research Thesis A
Term 2	PHYS3111 Quantum Mechanics
	Employability Experience Course
	ELEC4952
	Research Thesis B
Term 3	Discipline Elective
	Disciplinary / Breadth Elective
Term 1	ELEC4953 Research Thesis C
	PHYS3112 Experimental and Computational Physics
	PHYS3113 Thermal Physics and Statistical Mechanics
	SCIF3010 (0 UoC) Graduation Portfolio

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

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 <u>OR</u> MATH1141 Higher Mathematics 1A
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A
	SCIF0000 (0 UoC) Introduction to University
	DESN1000 Introduction to Engineering Design and Innovation
Term 1	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	
	MATH2069 Mathematics 2A	
Term 3	COMP1521 Computer Systems Fundamentals	
	MATH2089 Numerical Methods and Statistics	
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
	ELEC3104 Digital Signal Processing
Term 3	SCIF1000 Skills in Science
	ELEC3106 Electronics
Term 1	TELE3113 Analogue and Digital Communications
	PHYS2111 Quantum Physics
	PHYS2114 Electromagnetism
Term 2	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

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