

# **Bachelor of Engineering (Honours)**

## Specialisation in Electrical and Electronic Engineering

### **ENTRY REQUIREMENTS**

	Academic Requirements	Guaranteed entry - 80
	Assumed Knowledge	HSC Mathematics Advanced (Band 4) or equivalent. If you don't have the assumed knowledge, you're advised to undertake a bridging course in mathematics.
	Recommended Studies	HSC Mathematics Extension 1 or HSC Mathematics Extension 2 plus HSC Physics, or equivalent. HSC Software Design and Development or equivalent.

#### **COURSE STRUCTURE**

Bachelor of Engineering= 280 credit points		
Core Zone	70 credit points	
Specialisation in Electrical and Electronic Engineering	210 credit points	
Qualification = 280 credit points		

#### **CORE ZONE**

Essential units - 60 credit points			
ENGG1000 Introduction to Engineering	10		
ENGG1050 Engineering Design	10		
ENGG2000 Engineering Practice	10		
ENGG2050 Engineering Systems and Design Thinking	10		
ENGG3000 Engineering Project Practice	10		
ENGG3050 Engineering Leadership and Entrepreneurship	10		
ENGG4099 PACE: Industry Experience	10		
Capstone unit - 10 credit points			
Complete the capstone unit below.			
ENGG4001 Professional Practice	10		

#### **FLEXIBLE ZONE**

#### Flexible Zone = 40 credit points

This zone allows you to either gain more depth in your chosen area of study or learn about other areas that interest you. You can use your flexible zone to enrol in any Undergraduate unit for which you meet the requisites. You may also use your flexible zone to complete a minor.

#### **SPECIALISATION**

Electrical and Electronic Engineering = 210 credit points		
Complete th	e following units.	
MATH1010	Calculus and Linear Algebra I	
MATH1020	Calculus and Linear Algebra II	
COMP1000	Introduction to Computer Programming	
PHYS1510	Engineering Physics	
PHYS1520	Physics for Electrical and Electronic Engineering	
MATH2055	Engineering Mathematics II	
ELEC2005	Electrical and Electronic Systems	
ELEC2040	Signals and Systems	
ELEC2042	Digital Circuits and Systems	
ELEC2070	Linear Circuits and Devices	
ELCT3005	Power Electronics	
ELCT3006	Electrical Machines	
ELEC3024	Control Systems	
ELEC3042	Embedded Systems	
ELEC3076	Electronic Devices and Systems	
TELE3350	Communications Networks	
ELCT4001	Smart Power Grids	
ELCT4004	Power Systems Analysis	
ELEC4250	System on Chip Design	
ELEC4092	Electrical and Electronic Engineering Research Thesis A	
ELEC4093	Electrical and Electronic Engineering Research Thesis B	