

Bachelor of Engineering (Honours)

Specialisation in Mechatronic 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 Mechatronic 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

Mechatronic Engineering = 210 credit points	
Complete the following units.	
MATH1010	Calculus and Linear Algebra I
MATH1020	Calculus and Linear Algebra II
COMP1000	Introduction to Computer Programming
MECH1001	Introduction to Mechanical Engineering
PHYS1510	Engineering Physics
PHYS1520	Physics for Electrical and Electronic Engineering
ELEC2070	Linear Circuits and Devices
ELEC2005	Electrical and Electronic Systems
ELEC2040	Signals and Systems
MATH2055	Engineering Mathematics II
MECH2003	Mechanical Design 1
MTRN2060	Introduction to Mechatronics
ELEC3024	Control Systems
ELEC3042	Embedded Systems
MTRN3026	Mechatronic Systems
MTRN3060	Robotics and Automation
MTRN4062	Micro Electro Mechanical Systems (MEMS)
MTRN4066	Advanced Mechatronic Engineering
MTRN4068	Wireless Mechatronics
MTRN4092	Mechatronic Engineering Research Thesis A
MTRN4093	Mechatronic Engineering Research Thesis B