What do mechatronic engineers do?

This degree builds on the skills and knowledge of Mechanical and Electrical Engineering and Computer Science to develop autonomous systems, such as the smart machines and self-operating robots originally envisioned in sci-fi movies.

Mechatronic components are increasingly being used in the mining, agriculture and manufacturing industries, and graduates will be responsible for the self-driving cars of the future!

Career opportunities

Mechatronic engineers work in one of the many industries where automation is in demand, such as manufacturing, automotive mining, cargo handling and agriculture. They may also work in companies that design and manufacture consumer devices, such as mobile phones, game consoles and biomedical devices.
Sample degree outline

YEAR 1

TERM 1 | TERM 2 | TERM 3
--- | --- | ---
Physics 1A | Mathematics 1B | Elect and Telecomm Eng
Engineering Design | Programming Fundamentals | 
Mathematics 1A | Elective | Engineering Mechanics

YEAR 2

TERM 1 | TERM 2 | TERM 3
--- | --- | ---
Engineering Mathematics 2E | L1 Elective | Design and Manufacturing
Digital Circuit Design | Engineering Mechanics 2 | Mechanics of Solids 1
General Education | Comp for MTRN |

YEAR 3

TERM 1 | TERM 2 | TERM 3
--- | --- | ---
Microprocessors and Interfacing | Linear Systems and Control | Elective
Numerical Methods & Statistics | Prof. Eng and Comm | Engineering Design 2
Comp Appl in Mechatronic Sys | General Education |

YEAR 4

TERM 1 | TERM 2 | TERM 3
--- | --- | ---
Modelling and Control of Mechatronic Systems | Robot Design | Elective
Advanced Autonomous Systems | Robotics | Thesis C
Thesis A | Thesis B | Elective

This is a sample degree outline only and may be subject to change.

Other degrees

**DEGREE** | **YEARS** | **UAC CODE**
--- | --- | ---
Bachelor of Engineering (Honours) in Aerospace Engineering | 4 | 425050
Bachelor of Engineering (Honours) in Mechanical and Manufacturing Engineering | 4 | 425050
Bachelor of Engineering (Honours) in Mechanical and Manufacturing Engineering | 4 | 425050

How to apply

Australian and New Zealand students: Direct entry via UAC
[unsw.edu.au](http://unsw.edu.au)

International students in Australia: Apply via UAC International
[unsw.edu.au/international](http://unsw.edu.au/international)

International students not in Australia: Apply online via UNSW International
[international.unsw.edu.au](http://international.unsw.edu.au)

“..."I believe robotics and control systems will be in every part of our future. Whether it’s autonomous vacuum cleaners, quadcopters or robot soccer, I want to be a part of these amazing robotic technologies. The atmosphere at UNSW is energetic. There’s always an aura of students trying to build the next big thing.”

HAYDEN SMITH
Mechatronic Engineering (Honours)