



THE UNIVERSITY OF
MELBOURNE

Melbourne School
of Engineering



MECHATRONICS CAREER PATHWAYS

➤ For more information, visit
eng.unimelb.edu.au

MECHATRONICS AT MELBOURNE

The interdisciplinary nature of mechatronics opens the door to a variety of career options in areas including advanced manufacturing and automation, robotics, nanotechnology, aerospace, computing and electronics, hardware and software, bioengineering and mining engineering.

The Melbourne School of Engineering is the leading provider of engineering and IT education in Australia*, and ranked No.1 in Australia for Mechanical, Aeronautical and Manufacturing Engineering.#

Whether you are interested in a professional qualification, a career change, expanding your technical skills or pursuing a new interest, the Melbourne School of Engineering has a range of world class programs to meet your needs.

Our professional Master of Engineering is the first graduate program in Australia to offer accreditation from Engineers Australia and EUR-ACE®, enabling graduates to practice as engineers in Australia, Europe, the US, Japan, Singapore, and more.

Mechatronics engineering programs that we offer include:

- » [Master of Engineering \(Mechatronics\)](#)
- » [Master of Philosophy \(Engineering\)](#)
- » [Doctor of Philosophy \(Engineering\)](#)



Create technologies of the future

Self-confessed science fiction fan Ricardo Rosas says that he has always wanted to live in a world with robots. Ricardo decided to study mechatronics, so that he could be part of creating these new technologies.

“I chose mechatronics at Melbourne because of the quality of the research that is done here, and the quality of the university.”

During his studies Ricardo has worked on some academic research projects; an experience he values highly.

“I’ve been working on a couple of the robotics projects with one of the researchers here. It has been a very interesting experience, and one of the highlights of my Masters.”

Ricardo Rosas
Master of Engineering (Mechatronics)

Specialisations

Mechatronics combines the knowledge and skills of three engineering disciplines: mechanical, software and electrical engineering.

As a mechatronics engineer, you will have the opportunity to design, build, operate and maintain machinery with electronic and computer control systems such as aircraft, robots, motor vehicles, cameras, power generators and mining and chemical plant machinery.

Job Outlook

Engineering professionals are in demand, not only in Australia, but across the globe. With a rapidly growing population, the need for engineers will become more critical than ever to ensure our cities have adequate transport, power, water, telecommunications and healthcare.

Students are advised to begin building their employability skills whilst at university, to give themselves the best start to their careers. Visit the University Careers Service to find out more: careers.unimelb.edu.au

For more information about the job outlook for this sector, please visit the Australian Government’s Employment Projections and Job Outlook website: joboutlook.gov.au

For information about salaries, see: graduateopportunities.com

*No.1 in Australia; No.28 in the world. QS World University Rankings by Subject 2017.
#QS World University Rankings by Subject 2017.



Sectors & Employers

MECHATRONICS SECTORS & INDUSTRIES	EXAMPLES OF EMPLOYERS	
Aeronautics	BAE Systems	Siemens
Automotive	Bosch	Thales
Biomechanics	CNC Design	
Biomedical Engineering	Ford	
Software Engineering & Computing	Honeywell	
Manufacturing	Invetech	
Minerals and Energy	Outotec	
Power Generation		
Robotics		

Career Progression

GRADUATE	3-5 YEARS EXPERIENCE	10 YEARS	
Graduate Electrical Engineer	Automation Process Engineer	Mechatronics Project Engineer	Lead Mechatronics Engineer
Graduate Mechatronics Engineer	Control Systems Engineer	Process Control Engineer	Lead Mechatronics Consultant
Graduate Mechanical Engineer	Design Engineer – Mining	Product Design Engineer – Mechanical, Mechatronics, R&D or Systems Engineer	Lead Robotics Consultant
Graduate Software and Mechatronics Engineer	Electrical and Control Systems Maintenance	Product Development Engineer	Principal Mechatronics Engineer
Junior Mechatronics Engineer	Engineer – Power & Energy Industry	Reliability Engineer	Product Development Engineering Manager
Systems Engineer	Electrical Design Engineer	Robotics Consultant	Senior Control Systems Engineer
	Electrical/Mechatronics Engineer	Systems Design Engineer	Senior Mechatronics Engineer
	Field Service Engineer	Systems Engineer – Embedded Systems	Senior Process Control Engineer
	Industrial Engineer	Technical Officer – Mechatronics	Senior Systems Design Engineer
	Mechatronics Consultant		



Alternative Careers

An engineering degree at the University of Melbourne gives you a solid technical and design foundation combined with strong analytical, problem solving and communication skills valued across a range of industries. Other areas our graduates have moved into include:

- » Management consulting
- » Finance, economics and banking
- » Business analysis
- » Project management
- » Technical sales, marketing and communications
- » Intellectual property management
- » Technical writing
- » Government and policy

Careers in Research

If you are passionate about a field of electrical engineering and would like to advance your research skills, enrolling in a graduate research degree could be a great option for you. Graduate research enhances your ability to problem solve, think autonomously and creatively, and analyse. Careers in research are diverse and may include:

- » academic positions at universities;
- » policy-making or research positions at public sector organisations;
- » private sector research and development projects;
- » self-employed consulting positions on technical or policy issues in your area of expertise.

Employability Services and Industry Links

Students undertaking our programs have access to a range of employability services, and benefit from a curriculum that offers excellent opportunities to connect with industry through:

- » an elective internship subject
- » student projects partnered with industry
- » guest lectures led by industry leaders and experts
- » site visits hosted by key organisations
- » industry networking events
- » career panels featuring industry representatives
- » career question drop-in service
- » an online jobs and internships portal



Mechatronics Career Pathways. Authorised by the Manager, Marketing and Communications, Melbourne School of Engineering. Published August 2017.

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