Mechatronics and Robotics

About this area of study

Mechatronic engineers design and maintain machinery with electronic and computer control systems, such as aircraft, robots, motor vehicles, cameras, power generators and mining and chemical plant machinery. Mechatronic engineers may perform the following tasks: design, develop, maintain and manage high-technology engineering systems for the automation of industrial tasks, apply mechatronic or automated solutions to the transfer of material, components or finished goods, apply advanced electronic control systems, which are usually computer-driven, design and assist in the manufacture of consumer products, such as cameras and video recorders, apply electronic and mechanical processes and computers to tasks where the use of human labour may be dangerous, carry out studies into the feasibility, costs implications and performance benefits of new mechatronic equipment.

Key skills that Mechatronics and Robotics graduates demonstrate include

- Technical and engineering skills
- Communication skills
- Team work
- Problem solving skills
- Physics and mathematical skills

Courses offered by Deakin University include

- Bachelor of Engineering (Mechatronics and Robotics Major)

Labour market information

Grads online has information regarding graduate salaries and where graduates go after completing their course www.gradsonline.com.au

Job Outlook has information about the labour market outlook http://joboutlook.gov.au

Related occupations

- Electronic control systems engineers
- Robotics engineers
- Aerospace Engineer
- Agricultural Engineer
- Environmental Engineer
- Geological Engineer
- Industrial Engineer
- Mechanical Engineering Technician
- Mechanical Engineering Technologist

- Naval Architect

An industry career profile, salary and other employment information can be obtained from the My Future website www.myfuture.edu.au

Descriptions of occupations can be found at The Job Guide www.jobguide.thegoodguides.com.au

Employers

Holden www.holden.com.au

Shell www.shell.com

Alcoa World Alumina www.alcoa.com.au

BlueScope Steel www.bluescopesteel.com/graduates

Ford Motor Company www.careers.ford.com.au

Thiess www.thiess.com.au/careers/graduates

Honda www.honda.com.au

Roche www.roche.com.au

For specific employment opportunities visit the following sites

Engineering Jobs www.engineeringjobs.com.au

Technical Resources www.techresourses.com.au

Deakin University Jobshop www.deakin.edu.au/jobshop

Graduate Opportunities www.graduateopportunities.com

Uni Grad www.unigrad.com.au

Seek www.seek.com.au

My Career www.mycareer.com.au

Career One www.careerone.com.au

Professional associations

Engineers Australia www.engineersaustralia.org.au

Engineers Australia (Vic Division) www.vic.engineersaustralia.org.au

Association of Professional Engineers, Scientists and Managers,

Australia (APESMA) www.apesma.asn.au

Institute of Public Works Engineering Australia (IPWEA) www.ipwea.org.au

Australian Constructors Association www.constructors.com.au