

# What skills can graduates gain?

Through studying a degree in Mechatronics Engineering, graduates develop a valuable set of skills that are transferable to a range of careers. These skills can include:

- Practical application of engineering technology and science
- Technology, mechanical and computing abilities
- Broad knowledge of a range of engineering disciplines
- Problem solving that applies to real world challenges
- · Analytical, logical and quantitative thinking
- · Teamwork, planning and organisation
- · Creativity and innovation.

### A ied ea i g

Students undertake 800 hours of work experience as part of this engineering degree, providing them with a good understanding of the industry and the confidence to apply their skills in a workplace setting. This experience can deepen students' skillset, awareness of others, working knowledge and employability.

## Wha d e . . . e . . . f .?

Many employers look for generic skills such as communication, client/customer-focus, bicultural competence, cultural awareness, teamwork and initiative.

With technology, globalisation, and other drivers changing society, skills such as resilience, problem solving, and adaptability are important.

Skills that are likely to grow in importance include analytical and creative thinking, systems thinking and technological literacy.\*

\*W \_d Eq \_ \_ \_ c F \_ / : \_ . ef \_ . \_ . /
a @relinkappeng/hos collidedisjusjy)-f00.01 Tourism 6/453;57 Tcd(107)#S/para/strillun/ter/tourism29/000(3/8)#Mospacotov/do29/100(

# What jobs and activities might graduates do?

Graduates with this degree are employed in a range of jobs — see some examples below.



## P d c de e e e gi ee, de ig e gi ee, i d ia de ig e

- Research a client's brief, an organisational or social need, or a gap in the market
- Prepare drawings, models and proposals for new products or product improvements
- · Design and produce a prototype
- Test the prototype, ergonomics and investigate patents

#### A ai e gi ee

- Design and program high-tech computercontrolled equipment for industrial processes
- · Identify and fix machine issues

#### Mecha ic e gi ee

- Use mechanical, computer and controls knowledge to design and create products
- · Research components of design
- · Test products for efficiency and adaptability

## P ce de e e gi ee

- Optimise manufacturing processes for efficiency, scale, and cost-effectiveness
- Collaborate with cross-functional teams, analyse data, and ensure regulatory compliance

## S f a e e gi ee

- Analyse customer needs, evaluate computer software and research new technologies
- Develop software programs for new products
- · Manage software development projects

### R b ic ech icia, b ici

- Work in teams to design and develop robots
- Test robotic operations and processes
- · Service and maintain robotic functioning

#### Mecha ica /c e e gi ee

- Assist in the development of products using drafting tools or computer software
- · Design testing control equipment
- Research and advise on design modifications to resolve problems

## Pga e, faedee e

- · Determine specifications and write code
- · Build prototypes of software programs
- Managob.9 (iusd7d(dr(est prgs/f209 scn/ 0 T6t Td(09 scn/GS0 gs/T121 Tf-0.ee))1ualT0.0FEFF00/Span &ctualTexc