

Mechatronics Engineering Area of Practice / Area of Engineering

Mechatronics engineering is multidisciplinary and deals with integrating electrical and mechanical systems. It can include a combination of robotics, electronics, computing, telecommunications, systems, control, product engineering, and electronics to create functional, smart products.

Some of the indicative activities that may be undertaken when practising mechatronics engineering are:

- develop solutions to industrial problems
- product design, development and testing
- automation
- manufacturing
- by-wire technologies for vehicles
- modelling and simulation
- motion control
- teaching and training.

These activities could take place in any of the following Mechatronics Engineering domains:

- avionics and aerospace
- automotive industry
- bioengineering
- computer hardware and systems
- data communications and networks
- defence
- electromagnetic energy conversion
- embedded & real-time systems
- fluid power and other actuation devices
- human-machine interface engineering and ergonomics
- mining
- oil and gas exploration and production
- nanotechnology
- power electronics
- process management, scheduling, optimization, and control
- process plant and manufacturing systems
- robotics
- signal processing
- smart infrastructure.

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To find out more about mechatronics engineering visit our <u>Engineering communities</u> page.

How to apply

Mechatronics engineering is an area of practice available to those who want to become Chartered and is available to all occupational categories. Learn more about becoming <u>Chartered</u> and how to apply.

If you want to add mechatronics engineering as an additional area of practice, <u>email</u> us to enquire about the process.

Registration eligibility

Mechatronics engineers may need to hold statutory registration in an Area of Engineering in accordance with relevant legislation. Check the <u>State registration</u> for more information.



