Mechatronics Engineering

How will the fusion of traditional mechanical systems—with electronics and software—advance engineering design?

How will intelligent, autonomous robots be integrated into workplaces of the future?

Will artificial intelligence have a role to play in embedded systems?

How will robotic systems transform industries to make them more efficient and intelligent? How will this impact the human workforce?

How can an efficient mechatronics system improve product design and manufacturing?

This multidisciplinary program brings together mechanical, electrical and software engineering. You'll gain an understanding of how the design of mechanical systems must work together with electronic and computer controls.

Examples of mechatronic systems include: surgical robots, industrial automation systems, autonomous vehicles and drones.

Accredited by the Canadian Engineering Accreditation Board, graduates from this program meet the academic requirements for registration as a licensed professional engineer in Canada.

Our program integrates electronics and mechanical systems using automated, and intelligent computer-control systems. This produces new devices, micro-electromechanical systems and nanotechnology.

What will I study?

- Actuators and Power Electronics
- Electrical Circuit Design
- Fluid Mechanics
- Industrial Automation
- Introduction to Real-Time Embedded Systems
- Machine Design
- Mechatronics Design
- Microprocessors and Digital Systems
- Robotics and Automation
- Sensors and Instruments

Your final-year Capstone project emphasizes communication, teamwork and project management.

What can I do with my degree?

- Automation Engineer
- Controls Engineer
- Electro-Mechanical Systems Engineer
- Real-Time Systems Engineer
- Robotics Engineer

Want more information?

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