

# Mechanical Engineering

**How** will engineering designs meet customer desires and industry needs, while ensuring safety?

**How** will advances in power-generation systems—including hydrogen, solar electric and nuclear power—impact the environment?

**What** advances have been made in materials, and how will this open the door to new designs and devices?

**How** does the push for improved building energy efficiency impact businesses?

**How** can the development of microfluidic devices help protect people living in developing countries?

This program focuses on the analysis and design of machines, and how they work. Using principles of engineering, physics and materials science, you'll gain hands-on experience in a wide range of technologies—from robots, to vehicles and small medical devices, to sustainable energy systems.

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 is designed in consultation with industry to provide graduates with the latest knowledge in design, controls, thermo-fluids and instrumentation.**



## What will I study?

- Advanced Solid Mechanics and Stress Analysis
- Applied Thermal and Fluids Engineering
- Computer-Aided Design
- Control Systems
- Heat Transfer
- Kinematics and Dynamics of Machines
- Manufacturing and Production Processes
- Mechatronics
- Robotics and Automation

You can choose the Energy Engineering specialization or follow the comprehensive program.

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

## What can I do with my degree?

- Control systems
- Energy systems and simulation management
- HVAC projects
- Materials and manufacturing systems
- Mechanical systems
- Power generation
- Quality control and management
- Research and development of new technologies
- Robotics and automation solutions

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## Want more information?

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