

What can you do with a degree in... Mechanical Engineering?



What is Mechanical Engineering?

Mechanical Engineering is one of the largest, broadest, and oldest engineering disciplines. Mechanical engineers use the principles of energy, materials, and mechanics to design and manufacture machines and devices of all types. They create the processes and systems that drive technology and industry.

Mechanics, energy and heat, mathematics, engineering sciences, design and manufacturing form the foundation of mechanical engineering. Mechanical engineers researches, design, develop, manufacture, and test tools, engines, machines, and other mechanical devices. They work on power-producing machines, machine tools, material-handling systems, elevators and escalators, industrial production equipment, and robots used in manufacturing.

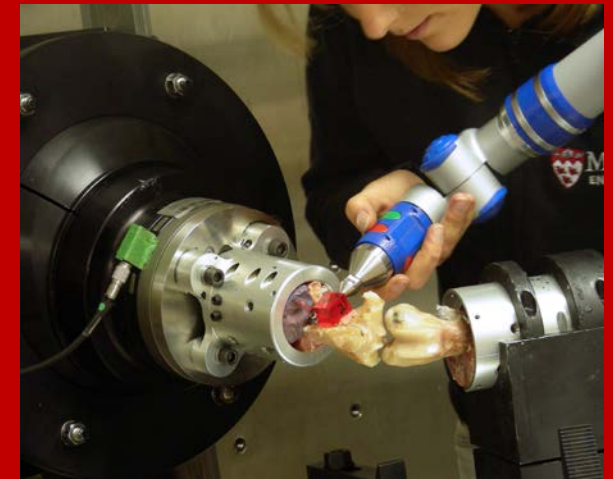
Mechanical engineers are curious about how things operate and enjoy the challenge of making them work better or developing new technologies that address new needs. They are creative and persistent in their search for solutions to problems. Mechanical engineers are good in math, physics and chemistry, and working in teams.

Where do graduates work?

Mechanical engineers work in the design, manufacturing and operations stages of countless industries, including aerospace, automotive, biomechanics, energy and power conversion, robotics, manufacturing, food processing, pulp and paper, textiles, heavy machinery and household appliances.

Recent graduates in Mechanical Engineering have gone on to exciting careers in a wide variety of industries, here a just a few:

Aviya Technologies Inc, Jr. Systems Engineer
Bell Helicopter, Associate Technical Specialist
Bombardier Aerospace, Liaison Engineer
CAE, System Software Specialist
Deloitte, Business Analyst
Kiewit, Field Engineer
Kinross Gold Corp., Mechanical Engineer
National Instruments, Application Engineer
PCO Innovation, CAD Consultant



Industries

Mechanical engineers are involved in the conception, design, implementation and operation of mechanical systems in many aspects of life, from bicycles and space shuttles. Their broad range of expertise, from thermodynamics and fluid flow to solid-state physics and fundamental electronics are highly valued.

- Aerospace
- Automotive
- Biomechanics
- Robotics
- Manufacturing
- Energy and Utilities: Hydro, Oil & Gas, Water
- Engineering and Management Consulting
- Finance & Insurance

Useful Resources

Career Resources

McGill Engineering Career Centre

- Resources, information, job postings and links for engineering students

myFuture

- Job postings McGill students

The Engineering Institute of Canada

- Engineering Career Network

McGill Institute for Aerospace Engineering

- Promotes and coordinates collaboration between academic and industrial researchers; plans and initiates courses and encourages undergraduate students to engage in projects with aerospace companies.

Professional Organizations

Engineers Canada

- The national organization of the 12 licensing bodies that regulate the practice of engineering in Canada

Ordre des ingénieurs du Québec

- The regulating body for Engineers in Quebec

Canadian Society for Mechanical Engineering

- Provides a wide range of activities for mechanical engineers with common fields of interest; these activities, which include social as well as technical occasions.

Society of Manufacturing Engineers

- Source for manufacturing knowledge, education and networking.



Student Life

The Department of Mechanical Engineering is one of the largest in the Faculty of Engineering. Getting involved in a club or other group is a great way to meet people and build your résumé.

Engineering Undergraduate Society (EUS)

Mechanical Engineering Project Teams

- Join one of the many teams to build cars, robotics and more and compete internationally!

Promoting Opportunities for Women in Engineering (POWE)

Engineers Without Borders

Student Affairs Office

- Housed in the Engineering Student Centre; Academic Advisors provide assistance and information on program planning and academic success.

Salary Information*

Starting salaries will vary according to location, industry and employer.

Average annual salaries for new graduates

Canada: \$52,000 - 62,000

United States: \$58,600 - \$64,200

Internship Salaries

\$15 - \$26 per hour

**Sources include: CACEE Campus Recruitment and Benchmark Survey (2011), NACE Salary Survey 2009, RIQ Enquete sur la rémunération directe des ingénieurs salariés du Québec (2012)*



Contact Us

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