What to do with a degree in Mechanical Engineering

Mechanical engineering involves the design and operation of any kind of machine whether it’s a wind turbine or a car. It’s one of the oldest and broadest engineering disciplines and is used in virtually every type of industry.

Mechanical engineers use math, physics and material science principles to design products, processes and systems. As a mechanical engineer, you could use your imagination and creativity to design and build anything from a robot that explores the surface of Mars to a biomedical device like an artificial joint.

The revolution in computation technology is changing the face of mechanical engineering. With advancements in computer modelling and rapid prototyping (3D printing), ideas can go from concept to prototype faster than ever before.

Controls, thermodynamics, fluid mechanics, solid mechanics, materials science, design, and heat transfer
Critical thinking and ability to solve complex problems
Oral and written communications
Research and design

Computers, including design and computational mathematics software
Teamwork and project management
Analysis and evaluation

Some of these roles may require further training, certification or education. Check out the Alberta Government’s occupational profiles for salary info and more detail: alis.alberta.ca/occinfo

Acoustics Engineer
Aerospace Engineer
Automotive Engineer
Consulting Engineer
Development Engineer
Facilities Engineer
Fluid Mechanics Engineer
Manufacturing Engineer
Mechanical Design Engineer
Mechanical Engineer
Operations Engineer
Project Engineer
Project Manager
Drilling Engineer
Pipeline Engineer
Production Engineer
Research Engineer
Reservoir Engineer
Robotics Engineer
Rotating Equipment Engineer
Sales Engineer
Systems Engineer

Potential Industries

Aerospace
Automotive
Biomedical
Government
Machinery
Mining
Manufacturing
Mechatronics
Military
Nuclear
Oil and Gas
Renewable Energy
Research and Development
Robotics and Automation Companies
Transportation
Utilities

Formal Career Assessments like the Strong Interest Inventory and the Myers Briggs Type Indicator can be helpful tools for your career development. Request an assessment via CareerLink

Need help deciding what to do?
Associations provide an opportunity for continued professional development. Many also offer networking opportunities and other events for their members.

- Association of Professional Engineers and Geoscientists of Alberta (APEGA): https://www.apega.ca/
- American Society of Mechanical Engineers (ASME): https://www.asme.org/
- Canadian Aeronautics and Space Institute (CASI): https://www.casi.ca/
- Canadian Society for Mechanical Engineering (CSME): http://www.csme-scgm.ca/
- Society of Manufacturing Engineers (SME) Canada: http://www.sme.org/smecanada/
- Institution of Mechanical Engineers http://www.imeche.org
- Society of Automotive Engineers http://www.sae.org

**Aligned Majors, Minors, Interdisciplinary Specializations, & Combined Programs**

- Mathematics
- Physics
- Minor in Manufacturing Engineering
- Minor in Mechatronics Engineering
- Minor in Petroleum Engineering
- Minor in Entrepreneurship and Enterprise Development (MEED)
- Minor in Management and Society
- Biomedical Engineering Specialization (BMES)
- Energy and Environment Specialization (ENEE)
- Bachelor of Science in Engineering and Bachelor of Commerce combined

**Student Clubs**

- Mechanical Engineering Students' Society (MESS): http://www.ucalgary.ca/mess/

**Additional Resources**

Career Opportunities in Engineering By Richard A. McDavid, Susan Echaore-McDavid, 2008 Technology & Engineering

Mechanical Engineering Magazine, American Society of Mechanical Engineers (ASME)

Canadian Society for Mechanical Engineering Bulletin (CSME) http://www.csme-scgm.ca/bulletin

**Career Services**

Your future starts here

- Career Planning
- Job Search Support
- Resume Reviews
- Career Workshops
- Online Job Postings
- Career Fairs
- Networking Events
- Information Sessions & much more!

**Connect with us:**

MacEwan Student Centre, Room 188
T: 403.220.8020
E: csstdnt@ucalgary.ca

CareerLink: ucalgary.ca/careers

u calgary careers

@HireUCalgary

**Job Boards**

Indeed: https://ca.indeed.com/
ECO Job Board: http://www.eco.ca/viewjobs/
EngineerJobs.com: http://www.engineerjobs.com/
EngineeringCareers.ca: http://www.engineeringcareers.ca
Techjobs.ca: http://www.techjobs.ca
CareerLink: careerlink.ucalgary.ca

**Engineering Student Centre**

Engineering Block C 205
T: 403.220.5732
E: engginfo@ucalgary.ca
W: http://schulich.ucalgary.ca/departments/mechanical-and-manufacturing-engineering

**Engineering Career Centre**

Engineering Block C 205
T: 403.220.3089
E: ecc@ucalgary.ca
W: http://schulich.ucalgary.ca/departments/mechanical-and-manufacturing-engineering