Chemical engineering involves transforming raw materials into useful products whether those products are used in oil and gas, manufacturing or in the emerging field of biomedical engineering.

Chemical engineers are on the front lines of significant advancements in a wide range of industries. They also play a key role in the growing markets for environmentally friendly products and processes. As a chemical engineer, you could design and oversee the processes involved in producing everything from refined petroleum products to pharmaceuticals.

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](alis.alberta.ca/occinfo)

**Sample Job Titles**

- Adhesives Engineer
- Biochemical Engineer
- Chemical Engineer
- Completions Engineer
- Drilling Engineer
- Environmental Engineer
- Exploitation Engineer
- Explosives Engineer
- Field Engineer
- Fuels Engineer
- Integrity Engineer
- Petroleum Engineer
- Pipeline Transport Engineer
- Polymer Engineer
- Process Engineer
- Production Engineer
- Project Engineer
- Pulp and Paper Engineer
- Refinery Engineer
- Research Engineer
- Waste Treatment Engineer

**Potential Industries**

- Adhesives and Coatings Production
- Biomedicine
- Energy
- Environmental Management
- Fermentation Processes
- Food and Beverage Processing
- Healthcare
- Metal Extraction and Refining
- Metallurgy
- Natural Gas Processing
- Nuclear Engineering
- Petrochemicals
- Pharmaceuticals
- Plastics and Composite Materials
- Pollution Control and Environmental Protection
- Process Control and Simulation
- Pulp and Paper Manufacturing
- Refining

**Key Skills & Knowledge**

- Processing steps used to convert materials into more usable forms
- Computer skills, including use of computer modelling software
- Analytical and critical thinking and development of solutions to complex problems
- Oral and written communication skills
- Teamwork and project management

**Sample Job Titles**

**Need help deciding what to do?**

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.
Associations provide an opportunity for continued professional development. Many also offer networking opportunities and other events for their members.

- The Association of Professional Engineers and Geoscientists of Alberta (APEGA): [https://www.apega.ca/](https://www.apega.ca/)
- Association of the Chemical Profession of Alberta (ACPA): [https://www.pchem.ca/](https://www.pchem.ca/)
- Canadian Association of Chemical Distributors: [http://www.cacd.ca/](http://www.cacd.ca/)
- Canadian Society for Chemical Engineering (CSChE): [https://www.cheminst.ca/about/csche](https://www.cheminst.ca/about/csche)
- NACE: [http://www.nacecalgary.ca/](http://www.nacecalgary.ca/)
- Institution of Chemical Engineers (IChemE): [http://www.icheme.org/](http://www.icheme.org/)
- American Institute for Chemical Engineering (AIChE): [www.aiche.org](http://www.aiche.org)

### 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](http://ucalgary.ca/careers)

![Facebook Icon] ucalgarycareers
![Twitter Icon] @HireUCalgary

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### Minors, Interdisciplinary Specializations & Combined Programs

- 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 degree

### Student Clubs

- Chemical and Oil & Gas Engineering Students' Society (CESS): [http://www.ucalgary.ca/cess/](http://www.ucalgary.ca/cess/)

### Additional Resources

- Careers in Oil + Gas: [http://www.careersinoilandgas.com/](http://www.careersinoilandgas.com/)
- BioTalent Canada: [https://www.biotalent.ca/](https://www.biotalent.ca/)

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**Engineering Student Centre**
Engineering Block C 205
T: 403.220.5732
E: engginfo@ucalgary.ca

**Engineering Career Centre**
Engineering Block C 205
T: 403.220.3089
E: ecc@ucalgary.ca

W: [https://schulich.ucalgary.ca/departments/chemical-and-petroleum-engineering](https://schulich.ucalgary.ca/departments/chemical-and-petroleum-engineering)