Chemical Engineering (B.S.)

Gain hands-on experience in harnessing chemical transformations to help solve today's engineering challenges.

Solving many of today’s chemical engineering problems boils downs to specialized technical knowledge that fuses chemistry, physics, math and economics. Over 85 percent of UND chemical engineering graduates participate in hands-on learning through industrial internships, undergraduate research, or student design competitions.

Program Snapshot

- **Program type:** Major
- **Format:** On-campus or online
- **Est. time to complete:** 4-5 years
- **Credit hours:** 130

Why Study Chemical Engineering at UND?

Chemical engineers transform substances and solve problems encompassing a broad range of industries, helping to make products and processes faster, safer, more reliable and sustainable. Leaders in this field have more than just a strong technical knowledge; they excel in critical thinking with solid real-world application experience.

With the UND chemical engineering undergraduate program, you'll benefit from an optimum curriculum mix that gives you the tools to succeed in your chosen field:

- Learn the fundamentals of the physical sciences, mathematics and chemical engineering.
- Participate in a hands-on lab sequence that emphasizes critical thinking and relates course content to real-world applications.
- Seize on many opportunities to design, conduct and analyze your own experiments.

Specialize Your Study of Chemical Engineering

Chemical Engineering students have the option of three concentration to further specialize their career path in chemical engineering. Your transcript will be marked with the concentration upon completion of the curriculum.

- **Energetics:** Concepts widely used in defense applications, space exploration, counter-terrorism, fire suppression and public safety technologies, automotive airbags, and fireworks.
- **Petroleum Engineering:** An emphasis on the upstream development, drilling and production of oil and natural gas.
- **Sustainability:** Designed for careers associated with sustainable energy technologies, climate change, rising energy costs and energy security.

Top Online Engineering College in the Nation

Every engineering program offers education, but not every program prepares students to make a real impact the way UND does. UND is increasingly regarded as one of the top academic and research institutions in the nation for engineering. We consistently rank among the best for educational quality, affordability, and career outcomes.

#3 - Best Online Colleges Offering Bachelor's in Engineering Degrees in 2019

Accreditation

Study chemical engineering at an accredited university. Both our on-campus and online programs are ABET accredited.

Application Deadlines

- **FALL:** Feb. 1* (on campus freshmen)  April 15* (on campus transfer students)  Aug. 10 (online)
- **SPRING:** Dec. 1
- **SUMMER:** April 1 (on campus)  May 1 (online)

*academic scholarship priority deadline
Program Highlights

- Tailor the program to your individual interests such as environmental concerns, alternative energy, materials, bio-processes or other areas.
- Learn in a smaller and interactive environment with class sizes of only 30-40 students.
- Graduate from a program accredited by the Engineering Accreditation Commission of ABET.
- Bring together all you've learned as part of a team participating in a process design and evaluation project (senior capstone course).

Outcomes

85%
Graduates who participate in experiential learning opportunities through industrial work studies, internships or undergraduate research

102K
Median salary range for a chemical engineer*

*U.S. Bureau of Labor Statistics

Chemical engineering graduates often go on to successful careers in today's fastest-growing and dynamic industries and sectors including: chemicals, agriculture, oil and gas, pharmaceuticals, and renewable energy.

UND chemical engineering graduates can expect a range of opportunities in careers like:

- Environmental engineer
- Plant process engineer
- Process design engineer
- Product development engineer
- Project engineer/manager
- Quality control engineer

Graduates in chemical engineering have gone on to work at such companies as:

- Marathon Oil
- 3M
- Cargill
- Dow Chemical
- Schlumberger
- Intel
- Energizer Battery
- US Steel