CHEMICAL AND BIOLOGICAL ENGINEERING

As a chemical engineering major, you will be part of a vibrant community of engineers in the Department of Chemical and Biological Engineering (https://engineering.wisc.edu/departments/chemical-biological-engineering/) and join a network of alumni who are shaping the modern chemical economy and creating positive impact in our society. Capitalize on advances in chemistry and biology to create new products, design chemical processes, develop energy resources, and protect the environment.

While chemical engineering is a demanding field, you will find having a degree in chemical engineering from UW-Madison will open doors to many exciting career paths and prepare you for a wide range of career opportunities, including:

- Pharmaceuticals
- Personal/beauty care products
- Food processing
- Public health
- Energy and materials
- Air and water quality
- Artificial intelligence
- Manufacturing
- Plastics & materials recycling
- Environmental sustainability

You will also find that UW-Madison chemical engineers are sought by many companies and industries outside the immediate field. You might choose to join the many alumni who have had successful careers at Fortune 500 companies, pursue graduate studies to become a professor, or pursue other career paths beyond engineering such as entrepreneurship, finance, policy, environmental science, healthcare, law, and business administration.

Through our program, you will acquire a rigorous education in the fundamental chemical engineering sciences from our award-winning faculty and outstanding mentors. Develop valuable design and problem-solving skills, discover tools and technologies that professional chemical engineers use every day, and explore topics like:

- Transport phenomena
- Artificial intelligence
- Kinetics
- Thermodynamics
- Catalysis
- Systems engineering
- Chemical process design
- Material sciences
- Biochemical engineering

Most of our courses involve hands-on learning, and you will have ample opportunity to explore our state-of-the art labs and high-tech makerspace. You will also have additional learning opportunities through internships and cooperative education experiences, and participation in research labs as an undergraduate. In today's landscape, it's also necessary to be a skilled communicator. To prepare you for after graduation, our curriculum places considerable emphasis on building soft-skills through technical report writing, team projects, and formal and informal presentations.

Along with core chemical engineering courses, classes in chemistry, physics, mathematics, and biology are required. In addition, students broaden their understanding of society and how engineering can have a positive impact by taking several courses in the humanities and social sciences.

DEGREES/MAJORS/CERTIFICATES

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- Chemical Engineering, BS (https://guide.wisc.edu/undergraduate/engineering/chemical-biological-engineering/chemical-engineering-bs/)

RESOURCES AND SCHOLARSHIPS

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SCHOLARSHIPS

For information about scholarships, see Wisconsin Scholarship Hub (https://wisc.academicworks.com/).

FACILITIES

Facilities available for instruction and research include:

Biochemical Process Lab
Electrochemistry Lab
Plastics Lab
Process Dynamics and Control Lab
Research Labs
Transport Phenomena Lab
Unit Operations Lab