Welcome to Chemical Engineering at UD!

The future is bright for those pursuing a career in Chemical Engineering! The ongoing biotechnology revolution and the challenges of providing sustainable, efficient, and clean energy create new opportunities for chemical engineers. By fulfilling these challenges, chemical engineers make a difference in the quality of life around the globe.

Chemical engineering explores the chemical, physical, and biological transformations needed to develop new products, design efficient processes, recover and recycle raw materials, protect the environment, and provide sustainable solutions to problems of commercial and societal interest.

Revolutionary products include:

- Pharmaceutical drugs that prevent or cure currently deadly diseases such as cancer, AIDS, and heart disease
- Composite materials for solar cells, fuel cells, and wind turbines
- New compounds that help plants grow faster and produce more food for the world’s population
- Hybrid vehicles and components used in high-tech gadgets, such as computers, cell phones, and flat screen TVs

At the University of Delaware, we combine an excellent faculty and superb physical facilities with a challenging, yet flexible, curriculum. Our program will prepare you to face the engineering challenges of the 21st century and allow you to focus on the intellectual and professional skills that fit your personal and professional goals.

A UD undergraduate chemical engineering education:

- Teaches techniques for model building
- Develops methods for designing experiments and interpreting data
- Emphasizes the use of laboratory data to solve real-world problems
- Enhances teamwork and leadership qualities
- Fosters effective written and oral communication skills

The prestige of our department attracts some of the best students in the country, making our program an exceptional experience. In addition, our chemical engineering education provides an ideal foundation for those interested in alternative careers in medicine, law, business, and management, due to its strong emphasis on problem-solving skills and quantitative analysis.

Delaware is an excellent choice for your undergraduate chemical engineering studies. Please enjoy the remainder of this brochure, which highlights some of the unique opportunities that we have to offer!

Raul F. Lobo, Professor

www.che.udel.edu
Why Choose UD?

The Department of Chemical Engineering at the University of Delaware provides a demonstrated combination of exceptional value and high-quality undergraduate education. Here are just a few things we have to offer:

Strong reputation - Consistently ranked as a top 10 program in chemical engineering

Value - US News and World Report “Best Buy”

Our Students - Academically talented, well-rounded, highly sought after

Commitment to Undergraduate Education - All courses taught by professors holding Ph.D. degrees. (Student-faculty ratio of 10:1)

Curriculum - Allows students to pursue personal and professional goals, with ample time for courses in social sciences and humanities

Advising - One-on-one departmental advising

SES - The Science and Engineering Scholars program unites sophomore students with faculty to perform in-depth research [www.urp.udel.edu/](http://www.urp.udel.edu/)

RISE - The Resources to Insure Successful Engineers program supports academically talented minority engineering students [www.engr.udel.edu/rise/index.html](http://www.engr.udel.edu/rise/index.html)

WIE - The Women In Engineering program pairs undergraduate women with women engineering professionals [www.engr.udel.edu/wie/](http://www.engr.udel.edu/wie/)

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Asha Quant, ChEG ’08
UD Track & Field
Photo courtesy of Erik Mackey

Tommy Scherr, ChEG ’08
Lacrosse Goalie, ’07 NCAA Final Four
Photo courtesy of Dan Cook

Professor Lenhoff instructing undergraduates in the eCALC Computer Lab.
Photo courtesy of George Whitmyre
Undergraduate Research & Internships

➲ Cutting-edge research in systems biology, biomedical engineering, microfluidics, nanotechnology, catalysis, high-throughput experimentation, renewable energy, polymers, composites, and process control.

➲ State-of-the-art instrumentation and computational facilities.

➲ Interaction with faculty, graduate students, and visiting scholars.

➲ Industrial internship opportunities with Air Products, Army Research Lab, ConocoPhillips, Dow Chemical, DuPont, ExxonMobil, W.L. Gore, Merck, Sandia National Labs, and others.

Study Abroad

➲ 40% of University of Delaware undergraduates study abroad.

➲ Recent chemical engineering program at the University of Melbourne, Australia during Winter Session.

➲ Intense laboratory and classroom study
➲ Snorkeling at the Great Barrier Reef and free-time in Sydney

Center for International Studies - www.international.udel.edu/

www.che.udel.edu/CHEG
Enhancements to the Degree

Degree With Distinction - Entails a creative research project with an oral defense before a faculty committee

Honors Degree Program - Rewards talented undergraduate students for pursuing their academic interests in greater depth than is typically required

Additional Opportunities for Study

Minors - 50% of engineering students have at least one minor.

Two minors are:

Biochemical Engineering

➢ Explore advances in biotechnology and medicine
➢ Receive interdisciplinary training in biology, biochemistry, and bioengineering

Energy Technology and Policy

➢ Study modern advances in green engineering and energy production
➢ Compare energy generation avenues using engineering, economic, social and environmental criteria

Other Popular Minors

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<thead>
<tr>
<th>Biology</th>
<th>Economics</th>
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<tr>
<td>Chemistry</td>
<td>Foreign Languages</td>
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<td>Computer Science</td>
<td>History</td>
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<td>Environmental Engineering</td>
<td>Mathematics</td>
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<td>Materials Science</td>
<td>Music</td>
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<td>Physics</td>
<td>Political Science</td>
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The McNair Scholars. A select group of Delaware undergraduates (some of whom are shown here) enjoy 100 percent success rates being accepted to, enrolling in, and completing graduate study. Photo courtesy of Lisa Berg.
Career Opportunities

Chemical Engineering Bachelor of Science

Starting Salaries

Recent UD Student Placement

Industrial Employers

<table>
<thead>
<tr>
<th>ABB Lumus</th>
<th>DuPont</th>
<th>Rohm &amp; Haas</th>
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<tr>
<td>Air Products</td>
<td>ExxonMobil</td>
<td>Samsung</td>
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<tr>
<td>Ajedium</td>
<td>General Electric (GE)</td>
<td>Sartomer</td>
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<td>BASF</td>
<td>GlaxoSmithKline</td>
<td>Sunoco</td>
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<td>BE &amp; K</td>
<td>Impact Membranes</td>
<td>UOP (Honeywell)</td>
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<td>Boeing</td>
<td>Intel</td>
<td>US Patent &amp; Trademark</td>
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<td>Conoco</td>
<td>Kimberly-Clark</td>
<td>US Peace Corps</td>
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<tr>
<td>Corning</td>
<td>Lehigh Concrete</td>
<td>W.L. Gore</td>
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<td>DEDC</td>
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<td>Dow</td>
<td>Paratherm</td>
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Graduate Schools

| Boston University Medical School | Penn State University |
| Caltech                         | Princeton University |
| Carnegie Mellon University      | Purdue University    |
| Drexel University               | Univ. of Delaware (Biochemistry) |
| George Washington Law School    | University of Illinois |
| Hebrew Union College            | University of Minnesota |
| MIT                             | University of Pennsylvania |
| Northwestern University         | University of Texas  |
Our beautiful campus is a major plus! The University of Delaware has a college-town atmosphere, yet we are centrally located between New York City and Washington, D.C. The Newark main campus (pronounced NewArk, as it was once spelled), is only minutes away from Interstate 95 and easily accessible by air, train, and car. Philadelphia International Airport is approximately 30 miles from campus.

From on-line course registration to ethernet-wired dorm rooms to over 350 wireless access points across campus, we use technology to make life easier for you.

For a virtual campus tour visit www.udel.edu/main/tour/onlyatdelaware.html

How to Apply

Online applications - www.admissions.udel.edu

Other helpful websites:

- Scholarship and Financial Aid information - www.udel.edu/finaid
- Honors Program information - www.honors.udel.edu/prospective.html
- Chemical Engineering Contact information - www.che.udel.edu/contact.html

Professor Thomas Epps III, Synthesizing new polymers for hydrogen fuel cells.

Photo courtesy of Kathy Atkinson

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Your greatest accomplishments are yet to come, at the University of Delaware!

STATEMENT OF RESPONSIBILITY - The University of Delaware community values both personal and academic freedom. All members of the campus community have the personal responsibility to promote an atmosphere of civility in which the free exchange of ideas and opinions can flourish. We do so by learning from individual and collective differences and respecting every human being.

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER - The University of Delaware is committed to assuring equal opportunity to all persons and does not discriminate on the basis of race, color, gender, religion, ancestry, national origin, sexual orientation, veteran status, age, or disability in its educational programs, activities, admissions, or employment practices as required by Title IX of the Education Amendments of 1972, Title VI of the Civil Rights Act of 1964, the Rehabilitation Act of 1973, the Americans with Disabilities Act, other applicable statutes and University policy. Inquiries concerning these statutes and information regarding campus accessibility should be referred to the Affirmative Action Officer, 305 Hullihen Hall, (302) 831-2835 (voice), (302) 831-4563 (TDD).
Choose a Career in Chemical Engineering

Chemical Engineering
Undergraduate Education

University of Delaware