

Drexel University Undergraduate Programs

# ENGINEERING

## The College of Engineering

Engineering is a career you can take in innumerable directions — from the oil fields of Texas to the boardrooms of Wall Street to the (as of yet) uninhabited corners of the globe. Whether your interest is in design, research, production, or even medicine, an engineering degree provides both versatility and superb employment potential.

With a degree from the College of Engineering, you might choose a career like:

- Electrical engineering, developing electrical equipment for digital communications, radar and surveillance, and robotics
- Environmental engineering, seeking to develop more effective methods of cleaning and preventing public health hazards
- Mechanical engineering, specializing in a variety of areas including aerospace, biomechanics, healthcare, and nuclear technology

## Engineering Majors

- Architectural Engineering
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Computer Science
- Electrical Engineering
- Engineering
- Engineering for Still-Deciding Students®
- Environmental Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Software Engineering

## For More Information

To learn more about Drexel and the College of Engineering, visit:

Admissions  
[www.drexel.edu/undergrad](http://www.drexel.edu/undergrad)

University Catalog  
[www.drexel.edu/catalog](http://www.drexel.edu/catalog)



## Drexel Co-op: Knowledge at Work

Classroom learning, research, projects, papers, and exams are all critical to academic pursuits. But experience in your field can really make you stand out. With Drexel Co-op, you can gain up to 18 months of résumé-enhancing experience by the time you receive your degree.

Drexel's engineering students have recently completed co-ops with:

- ConocoPhillips Company
- Google
- Lockheed Martin Corporation
- Shell Chemicals

## Resources: The Classroom and Beyond

At Drexel you will start your education in the classroom, but your experiences certainly won't end there. Here are some of the resources and opportunities available to students:

- Center for Telecommunications and Information Networking: A research division of Drexel's Department of Electrical and Computer Engineering, the center conducts state-of-the-art research in wired and wireless telecommunications and networking.
- Fiber Optics and Photonics Manufacturing Engineering Center: Develops educational programs and performs advanced research in fiber optics, with an emphasis on manufacturing technologies.
- Global Engineering Education Exchange (Global E3): Students receive academic credit for courses taken at an overseas institution, and practical training in a foreign setting for a summer, semester, or academic year. Countries include Australia, Austria, Denmark, Finland, France, Germany, Hong Kong, Hungary, Japan, Mexico, Singapore, Sweden, Turkey, and the United Kingdom.

- University Libraries: Four library branches serve the educational and research needs of students and faculty at Drexel. The Electronic Learning Center located in Hagerty Library on the University City Main Campus lends laptops, software, and DVDs to students.

## Enhanced Options: Go Further, Faster

Beyond our more than 70 majors and our innovative co-op options, Drexel offers a number of ways to enhance your academic experience, including:

- More than 15 accelerated degree programs in everything from the BS/MS in individual programs to the BS/MD, BS/MBA, and BS/JD degrees
- The Pennoni Honors College, open to qualified students from all Drexel majors
- Opportunities for both study and co-op abroad

## Campus Life: Make Yourself at Home

Drexel's residence halls are very popular stops on campus tours. Probably because prospective students know that a residence hall is more than just a place to sleep. Our residence halls offer either standard rooms or suites; they all have plenty of space for studying and socializing; and many provide optional Learning Communities, which allow students with similar interests to live in close proximity.

Student activities are another great way to meet new people and stay active on campus. At Drexel, students have many options to choose from, starting with:

- More than 220 cultural, media, service, and professional organizations



Senior design students prepare their solar powered vehicle for the Shell Eco-marathon.

- Performing arts groups, such as dance, music, and theater, which are open to all students regardless of major
- Varsity, club, and intramural sports teams

### Philadelphia: Expect the Unexpected

Philadelphia is the nation's fifth largest city. It's renowned for its historical sites and as a hub of the pharmaceutical, electronics, and finance industries. The city is home to first-class museums, theaters, shopping, dining, and nightlife, as well as major league sports and the nation's largest urban park system. Check out some of the ways Drexel can help you explore.

- **Cultural Passport:** This program gives you free access to museums, performance venues, and cultural events throughout the city.
- **Lindy Center for Civic Engagement (CCE):** All Drexel students are required to participate in service. The resources of the CCE will connect you with your community.
- **Region-Specific Courses:** One of the advantages to living in a historic and global city is that there's so much to study right outside your front door. Region-specific courses combine academic rigor with real-world discovery through local research trips.

## Degree Programs: Choose Your Own Adventure

- **Architectural Engineering**  
Prepares graduates for work in analysis, design, construction, and operation of residential, commercial, institutional, and industrial buildings.
- **Chemical Engineering**  
Equips students with the broad technical knowledge and teamwork skills required for the conversion of raw materials into valuable products.
- **Civil Engineering**  
Instills the principles of structural, transportation, environmental, geotechnical, water resources, and public facilities engineering as well as construction management.
- **Computer Engineering**  
Focuses on digital circuit design, computer hardware and organization, programming and computer software, algorithms, and networks.
- **Computer Science**  
Offers exposure to and hands-on practice in core areas including programming paradigms and languages, algorithms, systems, networking, and software engineering.
- **Electrical Engineering**  
Emphasizes computer-aided design and hands-on laboratory experience in three different tracks: telecommunications/digital signal processing, electronics, and electrical engineering.
- **Engineering**  
A technologically based pre-professional major allowing students to broaden their interests in interdisciplinary studies or to pursue pre-law or pre-med programs of study.
- **Engineering for Still-Deciding Students®**  
Helps you identify the right engineering path early in your college experience.
- **Environmental Engineering**  
Concerned with protecting human, animal, and plant populations from the effects of adverse environmental factors, including toxic chemicals and wastes, pathogenic bacteria, and global warming.
- **Materials Science and Engineering**  
Explores possibilities for extending the supply of materials, improving existing materials, and developing new and superior materials and processes.
- **Mechanical Engineering**  
Balances technical breadth with technical depth in preparing students for careers in industry and government as well as graduate study.
- **Software Engineering**  
Encompasses behavioral, managerial and technical aspects of software engineering and attempts to synthesize disciplinary paradigms and themes.

## Undergraduate Programs

Over 70 full-time programs

### Colleges and Schools

- Arts and Sciences
- Biomedical Engineering, Science, and Health Systems
- Business
- Education
- Engineering
- Information Science and Technology
- Law
- Media Arts & Design
- Medicine
- Nursing and Health Professions
- Pennoni Honors College
- Public Health
- Technology and Professional Studies

## Financial Aid and Scholarships

Your education is an important investment. At Drexel we are committed to providing you with information and resources to help you with the cost of a college education. The first step toward receiving financial aid is to complete the Free Application for Federal Student Aid (FAFSA) available online at [www.fafsa.gov](http://www.fafsa.gov) beginning January 1. Freshmen starting college the following fall should submit it by February 15 for maximum financial aid consideration. Drexel uses the information provided on the FAFSA to award need-based grants and scholarships.

To learn more about financing options, visit [www.drexel.edu/financialaid](http://www.drexel.edu/financialaid). To contact a representative from Drexel's Student Resource Center/Financial Aid office, visit <http://ask.drexel.edu>.

## Visit Us

The best way for you to learn about Drexel is to visit campus. We offer a variety of options to meet your needs. For more information or to schedule a visit, go to [www.drexel.edu/undergrad/visit](http://www.drexel.edu/undergrad/visit) or call 1-800-2-DREXEL (1-215-895-2400 for international students).

## Apply

Apply to Drexel University online at [www.drexel.edu/apply](http://www.drexel.edu/apply). The application fee is waived for students who apply online or during a Campus Visit.

## Contact Us

Undergraduate Admissions  
Drexel University  
3141 Chestnut Street  
Philadelphia, PA 19104-2876  
1-800-2-DREXEL  
215-895-2400  
[enroll@drexel.edu](mailto:enroll@drexel.edu)  
[www.drexel.edu/undergrad](http://www.drexel.edu/undergrad)

 [facebook.com/drexeladmission](https://facebook.com/drexeladmission)

 [twitter.com/drexeladmission](https://twitter.com/drexeladmission)

 [youtube.com/drexeluniv](https://youtube.com/drexeluniv)

