The College of Engineering ranks among the leaders in the world for engineering research and education.

Engineering fosters an environment for innovation and entrepreneurial spirit and as a top 10 engineering college, provides exciting opportunities for interdisciplinary research. It’s the second smallest school in the top 20 engineering colleges, with opportunity for true interdisciplinary research.

Engineering education at Carnegie Mellon is designed to produce leaders and to support creativity. Our engineering curriculum is sufficiently flexible to allow students to customize their course of study to suit their interests and professional objectives. Our aim is to prepare students for fulfilling, exciting careers and to provide them with the perspective and skills to be leaders in their endeavors.

**PROGRAMS**

- Biomedical Engineering*
- Chemical Engineering (BS)
- Civil Engineering (BS)
- Electrical and Computer Engineering (BS)
- Engineering and Public Policy*
- Materials Science and Engineering (BS)
- Mechanical Engineering (BS)

*May be taken as an additional major only

**FACULTY**

- Electrical and Computer Engineering
- Civil and Environmental Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Chemical Engineering
- Engineering and Public Policy
- Biomedical Engineering

**FRESHMAN STUDENTS**

- Electrical and Computer Engineering: 32%
- Chemical Engineering: 14%
- Materials Science and Engineering: 11%
- Civil and Environmental Engineering: 10%
- Mechanical Engineering: 21%
- Undecided: 12%

**Popular Freshman Courses**

- Fundamentals of Programming
- Discipline specific Intro to Engineering
- Biology
- Differential and Integral Calculus
- Chemistry
- Economics
- Language Courses
- Physics

**More than 50% of undergraduates conduct cutting-edge research, create new knowledge, advance their fields and publish results.**

**Engineering Admitted Student Statistics**

<table>
<thead>
<tr>
<th>SATCR*</th>
<th>SATM*</th>
<th>SATWR*</th>
<th>ACTE</th>
<th>ACTM</th>
<th>ACTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>690-770</td>
<td>740-800</td>
<td>690-780</td>
<td>33</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>

Rank 3% GPA 3.87 *Middle 50% range

**Notable Faculty**

- José Moura, ECE, and former Ph.D. student Aleksander Kavcic *invented a detector that could safely and accurately extract recorded data from disk drives*. With this technology, users will be able to recover data from over 60% of computers made in the last 14 years.
- Kathryn Whitehead, ChemE, was named by Popular Science as a 2015 Brilliant Ten winner for her work on drug delivery systems.
Student Startups

> Arden Rosenblatt (E 2013) and Alejandro Sklar (E 2013) created **PieceMaker Technologies**, a company that installs self-service 3-D printing kiosks in stores so that shoppers can design small toys and jewelry.

> **Hylion**, a company founded by Thomas Healy and Mario Avila of MechE and Hayden Cardiff of Tepper, was awarded the U.S. Department of Energy Clean Energy Entrepreneurship prize at the 15th annual Rice Business Plan Competition.

Impact-a-Thon

In this hackathon-like contest, students focus on trying to solve a social issue. Last year, teams designed models of accessible playgrounds for children with cognitive and physical disabilities.

DefCon

Carnegie Mellon’s cybersecurity team, The Plaid Parliament of Pwning, competes annually at the DefCon Capture the Flag competition, which is considered the “World Series of Hacking.” The team took top honors in 2013, 2014 and 2016.

Chemical Cars

The Carnegie Mellon ChemE Car Competition team competed at the AIChE’s Mid-Atlantic Regional Conference, and took home the award for best use of a biological reaction to power a car.

Build18

The Department of Electrical and Computer Engineering invites undergraduates from around the college to compete in a week of tinkering on self-proposed, creative projects to promote the playful aspects of engineering.

Alumni Accomplishments

Carolyn Duran (E 1992) and Merline Saintil (CMU 2005) were named to Business Insider’s list of the 22 Most Powerful Women Engineers in the World.

William Santana Li (ECE/MechE 1991) is the CEO and co-founder of Knightscope, Inc., an advanced security company that is developing autonomous robots to predict and prevent crime.

Brittani Grant (B.S., M.S., CEE 2012) was a project manager for the Smithsonian’s new National Museum of African American History and Culture in Washington, D.C., where she supervised the construction of an aluminum-paneled facade that acts as the building’s focal point.

DID YOU KNOW

1. **Over 25 National Science Foundation Fellowships** were received by our seniors to study in various graduate schools in the last five years. The fellowship includes over $40,000 per year stipend/cost of education allowance.

2. Students are assigned an advisor from the **College of Engineering Undergraduate Studies Office for the first year**. Advisors work with students beginning in June of the summer before enrolling to help them acclimate and register for courses. We also employ 9–10 upperclass student Virtual Peer Advisors, who help answer incoming student questions, via Facebook and email.

3. All of our B.S. Engineering programs offer **integrated M.S. programs** so interested students can continue their studies for a coursework-based master’s degree.

4. Carnegie Mellon is home to **53 elected members of the National Academy of Engineering**, an honorary organization founded to advance the well-being of the nation by marshaling the knowledge and insights of eminent engineers.

5. **Society of Women Engineers (SWE) student chapter** is consistently recognized nationally for its efforts to provide social and professional development opportunities on campus and outreach to the local Pittsburgh community. One major event is coordination and sponsorship of the Technical Opportunities Conference (TOC) each fall where 300 companies come to campus to recruit students for professional opportunities.

6. The **College of Engineering** is also referred to by students and alumni as CIT, a reference to its original name, the Carnegie Institute of Technology.