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

The College of Engineering at Carnegie Mellon fosters an environment for innovation and entrepreneurial spirit. It's the second smallest school in the top 20 engineering colleges, with opportunities 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.

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

### Popular First-Year Courses
- Fundamentals of Programming
- Introduction to Engineering (discipline-specific)
- Biology
- Differential and Integral Calculus
- Chemistry
- Economics
- Language Courses
- Physics

### Programs
- Biomedical Engineering*
- Chemical Engineering (BS)
- Civil Engineering (BS)
- Electrical and Computer Engineering (BS)
- Engineering and Arts*
- Engineering and Public Policy*
- Materials Science and Engineering (BS)
- Mechanical Engineering (BS)
- Science, Technology and Public Policy**

*May be taken as an additional major only by engineering students

**Additional major for students majoring outside of engineering (in the Mellon College Science, School of Computer Science or the Dietrich College), who are earning a BS degree.

### Faculty

#### Notable Faculty
- José Moura. ECE, and former Ph.D. student Aleksander Kavcic invented a detector that could safely and accurately extract recorded data from disc drives. With this technology, users will be able to recover data from over 60% of computers made in the last 14 years.
- Venkat Viswanathan, MechE, investigates energy storage and lithium-ion batteries for sustainable electric vehicles and planes. Quoted in media outlets like Fortune, the Wall Street Journal, and Wired, he has received the National Science Foundation CAREER Award.
Impact-a-Thon

In this hackathon-like contest, students focus on solving social issues. Previously, teams have designed medical devices to assist people during natural disasters.

DefCon


Chemical Cars

The Chemical Engineering Car Competition team competes in annual regional and national competitions to build a model-sized car propelled and stopped by chemical reactions.

Build18

The Department of Electrical and Computer Engineering invites undergraduates from around the college to compete in a week-long, hands-on tinkering contest that promotes the playful aspects of engineering.

Startup Successes

> Ph.D. student Navid Kazem and Mechanical Engineering Associate Professor Carmel Majidi co-founded the start-up Arieca after they invented “Thubber,” a thermally conductive rubber material for soft, stretchable machines and electronics.

> When Josh Caputo was a Ph.D. student in Mechanical Engineering, he founded HumoTech, a company that makes robotic legs that mimic prosthetic limbs.

Alumni Accomplishments

James Rogers (E 2007) founded Apeel Sciences, a company that creates edible products from plant extracts that allows growers to reduce reliance on pesticides and increase produce quality and shelf life.

Corinne Clinch (E 2014) co-founded the startup Rorus Inc. The company produces a water filter cartridge that uses nanotechnology to produce drinkable water by removing waterborne viruses, protozoa and bacteria.

Thomas Healy (E 2014) founded Hyliion — a company that hybridizes tractor-trailers by installing an intelligent electric drive axle on the trailer to capture wasted energy and reduce fuel use by 30%. This feat earned him the title “Forbes 30 Under 30” in the Energy category.

Brittani Grant (E 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. Students are assigned an advisor from the College of Engineering Undergraduate Studies Office for the first year. Advisors work with students beginning in the summer before their first year 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.

2. 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.

3. Carnegie Mellon is home to 59 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.

4. 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.

5. 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.

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