Electrical & Computer Engineering (ECE) at Carnegie Mellon University is a top 10 department of highest scholarly and innovative quality. Our mission is to inspire, educate, and produce engineers capable of tackling fundamental scientific problems and important societal challenges, and to do so with the highest commitment to quality, integrity, and respect for others. ECE impacts society through work on compute/storage, cyberphysical, data/network science, security, and nanotechnology systems as well as application domains such as energy, smart infrastructure, healthcare & quality of life, and mobility.

Global ECE program locations
- Pittsburgh
- Silicon Valley
- Portugal
- Rwanda
- Singapore

2016-17 student population: 1,116
- B.S. 552
- M.S. 325
- Ph.D. 239

2015-16 degrees granted: 423
- B.S. 149
- M.S. 226
- Ph.D. 48

Faculty members: 180
- Core 76
- Courtesy 66
- Adjunct 38

Corporate partnerships

Recent employers of our graduates

200 disclosures filed and patents issued in the last five years

Sponsored research FY17
- $29M

NSF Career Awards in the last five years
- 5

Active alumni
- 9,000+

Research thrust areas
- Theoretical & technological foundations
- Beyond CMOS
- Compute/storage systems
- Cyber-physical systems
- Data/network science systems
- Secure systems
- Energy
- Healthcare & quality of life
- Mobile systems
- Smart infrastructure

Research centers and facilities
- Center for Nano-enabled Device and Energy Technologies
- CyLab, Data Storage Systems Center, General Motors Collaborative Research Lab, Intel Science and Technology Center for Cloud Computing, Nanofabrication Facility

RANKINGS
(U.S. News & World Report)
- Undergraduate
  - Electrical: 10
  - Computer: 4
- Graduate
  - Electrical: 8
  - Computer: 2

Understanding industrial positions (CEO, CTO, CFO, president, founder, etc.): 361

Alumni and former faculty in leadership academic positions (department head, dean, president, etc.): 18
Professor Raj Rajkumar received the 2016 IEEE Simon Ramo Medal, which recognizes technical leadership and contributions to fundamental theory, practice and standardization for engineering real-time systems.

Over $1.9 million of industrial funding annually is going to the Data Storage Systems Center (DSSC) for advanced data storage.

ECE graduate students received a number of prestigious fellowships as well as paper awards at international conferences.

The Sherman and Joyce Bowie Scott Hall is the newest addition to Carnegie Mellon University’s campus. The 100K sq. ft. building houses wet and dry laboratories, collaborative and office spaces, a cafe, and a 10K sq. ft. cleanroom facility.

The ECE Department offers graduate programs in Pittsburgh, Silicon Valley (M.S. and Ph.D.), Kigali, Rwanda (M.S.), and Portugal (dual-degree M.S./MBA and Ph.D.).

In the Department of Electrical and Computer Engineering, about 27 percent of the undergraduate population are females, almost twice the national rate.

Associate Professor Vyas Sekar is the recipient of SIGCOMM’s Rising Star Award, which recognizes a young researcher who has made outstanding research contributions to the field of communication.

Build 18, a week of freestyle tinkering planned by the students and for the students, illustrates ECE’s maker culture.

A Software Engineering M.S. degree is being offered to students at all locations from the Silicon Valley campus, leveraging on the unique entrepreneurial eco-system to offer superior education and access to internships and coveted jobs.

Together with Carnegie Mellon's College of Engineering, the Center for Faculty Success and the School of Computer Science, and in collaboration with the MIT EECS department, CMU ECE hosted the Rising Stars in EECS Workshop in October 2016. This annual academic career workshop brought together the world’s brightest female Ph.D. students, postdocs, and engineers/scientists, for two days of scientific interactions and career-oriented discussions aimed at navigating the early stages of careers in academia.