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.

**FAST FACTS**

### 2015-16 student population: 1,050

- **B.S.** 509
- **M.S.** 293
- **Ph.D.** 248

### 2015-16 degrees granted: 423

- **B.S.** 149
- **M.S.** 226
- **Ph.D.** 48

### Faculty members: 172

- **Core** 76
- **Courtesies** 62
- **Adjuncts** 34

### 9,000+ Active alumni

### Sponsored research FY16

- **Funding** $37M

Disclosures filed and patents issued in the last five years: 200

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**Global ECE program locations**

- Pittsburgh
- Silicon Valley
- Portugal
- Rwanda
- Singapore

**RANKINGS**

(U.S. News & World Report)

**Undergraduate**

- Electrical: 11
- Computer: 5

**Graduate**

- Electrical: 8
- Computer: 2

**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

**Research thrust areas**

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

**Corporate partnerships**


**Recent employers of our graduates**


Members of National Academies of Engineering and Science: 3 core; 6 courtesy; 1 adjunct; 3 emeriti

Alumni in leadership industrial positions (CEO, CTO, CFO, president, founder, etc.): 361

Alumni and former faculty in leadership academic positions (department head, dean, president, etc.): 18
Assistant Professor Brandon Lucia won the 2015 Bell Labs Prize for his lab’s work on OIC: The Operating System for Intermittent Computing.

Over $1.7 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.

ECE alumni council member, Nikhil Balram, was honored with the 2015 Industrial Distinguished Leader Award from the Asia-Pacific Signal and Information Processing Association (APSIPA). Dr. Balram is President and CEO of Ricoh Innovations Corporation (RIC).

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.).

A number of classes are offered across locations and time zones using novel educational and technological advances.

Associate Professor David Brumley is the new director of Carnegie Mellon’s campus-wide cybersecurity research and education center, CyLab.

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.

DARPA PERFECT and HACMS grants fund seven faculty members from the computer systems, signal processing and circuits areas and three external subcontractors (for a total of $12.4 million over five years).

Existing 4,000 sq. ft. nanofabrication facility is expanding to a new 10,000 sq. ft. state of the art facility in Scott Hall in May 2016 to enable research in data storage, M/NEMS, nanomaterials and health technologies.