**FAST FACTS**

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.

**2017-18 student population: 1,195**

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<th>B.S.</th>
<th>M.S.</th>
<th>Ph.D.</th>
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<tr>
<td>2017</td>
<td>532</td>
<td>433</td>
<td>230</td>
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**2016-17 degrees granted: 462**

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<td>2016</td>
<td>163</td>
<td>260</td>
<td>39</td>
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**Faculty members: 174**

- **74** core
- **66** courtesy
- **34** adjunct

**9,000+ Active alumni**

**Sponsored research FY17**

$29M

**Disclosures filed and patents issued in the last five years**

200

**Global ECE program locations**

- Pittsburgh
- Silicon Valley
- Portugal
- Singapore
- Africa
- Thailand

**RANKINGS**

(U.S. News & World Report)

**Undergraduate (2019)**

- Electrical: 9
- Computer: 1

**Graduate (2020)**

- Electrical: 8
- Computer: 3

**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
- Cyber-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
Diana Marculescu, the David Edward Schramm Professor of Electrical and Computer Engineering, received the 2018 Barbara Lazarus Award for fostering an inviting and nurturing environment for graduate students and young faculty at the university.

De-stress with ECE activities take place every semester. In the past, events have included mental wellness workshops on a range of topics including stress management and finding happiness. During particularly stressful times of the semester, such as midterms and finals weeks, the department provides snacks and catered meals. Students are also encouraged to visit wellness spaces in ECE department lounges. These spaces are available day and night, and equipped with coloring books, games, snacks, and blank stationary so students can write encouraging notes to each other and their families.

Assistant Professor Gauri Joshi is investigating multi-armed bandit algorithms to make data-driven inference and decision-making faster and more efficient. She recently received the Berkman Faculty Development Award to aid her research and acquire real-world data sets to validate her findings.

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

Assistant Professor Brandon Lucia was awarded a National Science Foundation (NSF) CAREER Award supporting his research on the next generation of reliable, capable intermittent computer systems.

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

Carnegie Mellon University and King Mongkut’s Institute of Technology Ladkrabang, a leading engineering university in Thailand, announced a long-term collaboration to significantly expand research and education in the areas of information, computing, and autonomous technologies.

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.

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