Our department is on the cutting edge of technology.

Duke ECE conducts a broad range of research in areas such as computer architecture and systems; signal and information processing; microelectronics, photonics and nanotechnology; and information physics, particularly metamaterials, quantum devices and optical systems.

Our program emphasizes the acquisition, processing, control, transmission, and application of information and energy by what are fundamentally electrical or electromagnetic means. We designed a flexible program so you can pursue your goals, whether through a double major or hands-on learning outside the classroom—through student clubs in robotics, motorsports, sustainable living and more, or service-leaning organizations like Duke Engineers for International Development and the DukeEngage program.

You can do research as an undergraduate.

More than half of Pratt students participate in hands-on, laboratory research for formal class credit. Many apply to become Pratt Research Fellows or NAE Grand Challenge Scholars, or are involved in volunteer, summer, or paid research opportunities. All ECE seniors also complete a capstone design project that provides an immersive, real-world engineering experience.

Recent projects by ECE students:

- Mobile robots navigation control
- Signal processing for an EEG-based brain-computer interface
- Engineering electric and magnetic metamaterials
- Live processing and live art: performance and technology
- Redesigning wireless Internet with software radios
- Signal processing of marine mammal acoustics

WHY CHOOSE ELECTRICAL & COMPUTER ENGINEERING?

Electrical and computer engineering (ECE) encompasses the largest engineering workforce in the U.S. These engineers design, develop, test, and supervise the manufacture of electrical and electronic equipment such as iPods, smartphones, and computers and large-scale systems such as power generation systems, hydroelectric plants, turbines, and solar panels for homes, factories and businesses.

Learn more: ece.duke.edu
Our students go places.

The job opportunities for ECE graduates are limitless. Electrical engineers are improving television and satellite transmissions, helping the military detect unexploded bombs, helping us understand how marine mammals communicate, developing gigapixel cameras, and making cochlear implants for deaf persons more effective in interpreting sound. Computer engineers can specialize in digital systems, computer operating systems, networks, software, and hardware.

Some places our recent graduates have gone:

Graduate & Professional Schools:
- Massachusetts Institute of Technology
- Stanford University
- University of Pennsylvania
- UT Austin

Industry:
- Accenture
- Amazon
- Clark Construction
- Gamechanger
- Goldman Sachs
- Google
- Microsoft
- Red Hat
- Yahoo!

After-graduation plans for 2014 ECE seniors:

- Working full-time: 74.4%
- Grad/professional school: 17.9%
- Other education program: 7.7%
- Starting my own company or organization: 2.6%

*Some students chose more than one answer.

Of 2014 Duke ECE seniors seeking employment, **93%** had a job or job offer(s) at the time of graduation.

Area of employment for 2014 ECE grads entering the workforce:

- Computers, IT: 72.4%
- Finance: 10.3%
- Business & management consulting: 6.9%
- Construction, manufacturing, energy/mining, utilities: 3.4%
- Engineering, architecture, design: 3.4%

Type of position:

- Software developer or programmer: 51.7%
- Consultant: 17.2%
- Manager or administrator: 10.3%
- Financial analyst or advisor: 6.9%
- Business development analyst: 3.4%
- Product manager: 3.4%
- Engineer: 3.4%
- Entrepreneur: 3.4%

Plans for 2014 ECE grads directly entering graduate/professional school:

- PhD/doctorate in engineering or other applied sciences: 61%
- Master’s degree in engineering: 23%
- Master’s degree in business (MBA): 8%
- Other master’s degree: 8%

16% of Duke ECE grads go to work for start-up companies...including their own.