



Undergraduate Program | School of Electrical and Computer Engineering



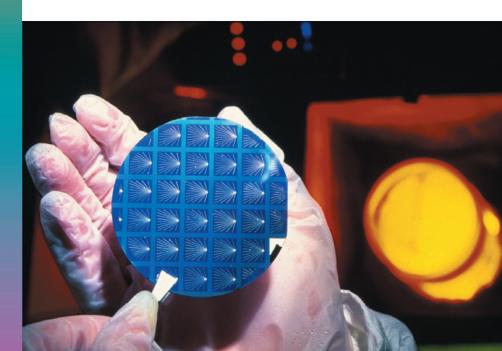
### This is ECE

It is said that scientists study what is, while engineers create what never was...

The fundamental cornerstones of **electrical engineering** are the control of information, electric signals and power, and technologies to enable each. **Computer engineering** combines the study of computer systems with the fundamental aspects of electrical engineering.

Enroll at Georgia Tech's School of Electrical and Computer Engineering, consistently ranked among the top programs in the country by *U.S. News & World Report*, and ride the crest of this revolution. With a degree in EE or CmpE, you can play a part in creating world changing technologies that can. . .

Monitor heart and blood pressure through implantable wireless sensors | Provide solar energy to communities around the world that presently exist without electricity | Enable senior citizens to live independently through technologically equipped "smart houses" that monitor and support activities of daily living | Advance and facilitate law enforcement through electronic detection of cocaine and other narcotics | Save military and civilian lives by detecting land mines using high-frequency seismic waves | Pack the information from 1,000 CDs into the space of a wristwatch





### Your future is bright..

The need for engineering talent is outpacing the stock of graduates in this field, as the U.S. Department of Labor continues to forecast tremendous growth in the demand for engineers over the next decade.

Recession-tolerant careers

Among the highest starting salaries of any engineering profession

Enter top graduate engineering programs, business, medical, and law schools

As a Georgia Tech graduate, you will be among the most sought after of all new engineers. Georgia Tech's Career Services Office sponsors annual career fairs, with over 1,200 participating employers seeking and vying for our graduates every year.

An ECE graduate has many exciting paths to follow. Our graduates themselves tell this story:

- They have been hired by top industry leaders such as Harris Corporation, Texas Instruments, BellSouth, Microsoft, Procter & Gamble, IBM, and Intel.
- They have entered the nation's top graduate engineering programs, including MIT, University of California-Berkeley, and of course, Georgia Tech!
- They have entered top business schools, including Harvard University, the University of Pennsylvania's Wharton School, and the University of Chicago.
- They have entered the best law schools, including Emory University Law School and Boalt Law School at the University of California-Berkeley.

### The curricula...

You will receive an undergraduate education that is unsurpassed in quality, depth, and scope. You will build a solid foundation of all of the fundamentals of engineering science, and from here, you will be educated to apply these principles to solve engineering problems. The elective hours allow you to tailor your undergraduate program to your own area of interest.

In addition, you will build important communication and team building skills through our Undergraduate Professional Communications Program, which teaches these skills in the context of actual classroom activities that extend from your freshman year to your culminating Senior Design Project.

# Learning outside the classroom...

**Cooperative Education**. Started in 1921, Georgia Tech's Cooperative Plan is the largest optional co-op program in the country and the highest ranked co-op program among public universities. This program is ideal for students who wish to integrate practical experience with theory learned in the classroom. ECE



graduates are active in cooperative education, making up over 20 percent of the Plan's participants. Job opportunities are available across the country and overseas.

**Undergraduate Research**. ECE's Undergraduate Research Opportunities Program (UROP) allows students to obtain real world research experience in a field of interest related to their majors. Many students earn course credit for their research activities, while others are paid.

Georgia Tech's Undergraduate Research Option enables ECE students to build on their UROP experience with up to four semesters of research, culminating in an undergraduate thesis.

**Study Abroad**. Georgia Tech offers many different study abroad programs. In 1990, ECE took the lead in founding Georgia Tech Lorraine, Georgia Tech's campus in Metz, France, and in creating the Georgia Tech Shanghai Initiative in China.

Georgia Tech's new International Plan allows students to supplement their undergraduate degrees with two semesters abroad of academic study and/or industrial



internship. The International Plan is an intensive degree-long program designed to prepare Georgia Tech students professionally and personally for successful lives in the 21st century.

**Transfer Programs**. Georgia Tech offers three specific programs for students who, for various reasons, prefer to attend another college before coming to Georgia Tech.

**Dual Degree Program**. Under the Dual Degree Program, students attend a participating school for three years and then come to Georgia Tech for approximately two years. Dual Degree students may seek a degree in any undergraduate program in the College of Engineering. Upon completion of the program at Tech, the student



receives a bachelor's degree from the first institution and a bachelor's degree from Georgia Tech. Participating institutions include several historically black colleges and women's colleges.

**Regents' Engineering Transfer Program**. The Regents' Engineering Transfer Program (RETP) is a partnership between Georgia Tech and 15 institutions in the University System of Georgia in which students who are residents of Georgia complete most of the courses in the first two years of an engineering program at the RETP institution and then transfer to Georgia Tech to complete the requirements for the engineering degree.

**Regional Engineering Program at Georgia Tech Savannah**. Students in southeast Georgia may earn undergraduate degrees in civil, computer, electrical, and

mechanical engineering at Georgia Tech Savannah. The campus is home to the Georgia Tech Regional Engineering Program (GTREP), an academic collaboration between Georgia Tech and three partner institutions — Armstrong Atlantic State University, Savannah State University, and Georgia Southern University. Just as in the RETP, students attend a partner institution for the first two years and then transfer to Georgia Tech to complete their engineering degree. However, GTREP students remain physically located in southeast Georgia and are taught by local Georgia Tech faculty supplemented by distance learning connections.



### Hot topics in ECE...

ECE is organized into 10 Technical Interest Groups that collectively encompass the full depth and breadth of this dynamic field. Each group has

faculty members who are recognized as world leaders in their field. You will have the opportunity to learn from the best and possibly work with them on research.

Our groups include:

Bioengineering | Computer Engineering | Digital Signal Processing | Electrical Energy | Electromagnetics | Electronic Design & Applications | Microsystems & Packaging | Optics & Photonics | Systems & Controls | Telecommunications







# Student organizations & activities...

ECE offers many opportunities for students to work and socialize with each other outside the classroom. Student organizations within ECE include:

- Eta Kappa Nu, the ECE Honor Society
- ECE Student/Faculty Committee
- Women in ECE
- IEEE Student Chapter



## Scholarship information...

A number of scholarships are available to students interested in entering the College of Engineering. For up-to-date information on scholarships available to freshmen, visit the Office of Scholarships and Financial Aid web site at: **www.finaid.gatech.edu**.

# Apply to...

Inquiries regarding admission to Georgia Tech should be addressed to: Georgia Tech Office of Undergraduate Admission Georgia Institute of Technology

Atlanta, GA 30332-0320 Phone: 404.894.4154

E-mail: admission@success.gatech.edu

www.admission.gatech.edu





#### Atlanta...

Georgia Tech is located in the heart of midtown Atlanta, one of the fastest growing markets for high-tech development. Atlanta is an ethnically diverse city offering many cultural and social experiences, including

professional sports teams, festivals, parks, an excellent symphony orchestra, opera, live theater and dance troupes, superb restaurants, and exciting nightlife.

### Contact information...

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