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Admissions Information

Application forms are available from:

UT Office of Undergraduate Admissions
320 Student Services Building
Knoxville, TN 37996-0230
Phone: (865) 974-2184
Online: ***»admissions.utk.edu/undergraduate***

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THE UNIVERSITY OF TENNESSEE KNOXVILLE
DEPARTMENT OF ELECTRICAL ENGINEERING & COMPUTER SCIENCE

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Electrical Engineering and Computer Science

GUIDE FOR PROSPECTIVE STUDENTS

www.eecs.utk.edu

ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

Welcome

The Department of Electrical Engineering and Computer Science at the University of Tennessee offers three undergraduate degrees: BS in computer engineering, BS in computer science, and BS in electrical engineering. We are the largest department in the College of Engineering with forty faculty, who are respected world-class leaders in their fields and are dedicated to teaching students and aiding them in developing technical and communication skills necessary to have successful careers. Our rigorous curriculum prepares students to be successful in their future profession and offers the flexibility for students to choose courses that match their interest areas. Our graduates earn top salaries with leading companies in Tennessee and throughout the United States.

Our department is located in the Min H. Kao Building, a 150,000 square foot facility that opened in 2012. The building houses state-of-the-art instructional facilities, including teaching laboratories with the latest electrical and electronic equipment, computers, and software so that students will receive an education using the modern tools and techniques expected of new graduates. I hope that you will pursue one of the challenging degree programs offered by our department and earn a degree that enables you to embark on a life-long career that you will find personally rewarding and financially fruitful.

Leon Tolbert

Leon Tolbert

EECS Department Head

Areas of study

Electrical engineering deals with the application of the physical laws governing charged particles. From miniature integrated circuits that contain millions of microelectronic devices, to high-speed fiber-optic communication systems that span international boundaries, to the massive generation plants that provide our electricity supply, electrical engineering impacts every aspect of modern-day living. Electrical engineering stands out among the engineering disciplines for its wide range of applications—so diverse that it is not always apparent that there is an underlying connection. As an electrical engineering student at UT, you will study digital and analog electronic devices, power systems, control systems, communications, antennas, wireless networking, and much more.

Computer science is the study of software and hardware systems and of the theory of computation. Students solve problems from biology, business, social sciences, and the physical sciences by applying concepts of computation. The work of computer scientists falls into three categories: 1) designing and building software, including aspects of web development, user interfaces, security issues, mobile computing, and so on; 2) developing effective ways to solve computing problems, such as storing information in databases, sending data over networks, or providing new approaches to security problems; and 3) devising new and better ways of using computers and addressing particular challenges in areas such as robotics, computer vision, and bioinformatics. Our curriculum emphasizes fundamentals and the ability to learn new developments in the field.

Computer engineering deals both with the electronic hardware side of electrical engineering and the programming side of computer science. With the increasing needs of both industry and technology that drive our future, computer engineering has become a discipline of its own. Typically, a computer engineering curriculum provides a background in three broad areas—hardware, software, and hardware-software integration. Students will also have the opportunity to explore fundamental topics such as microprocessors, computer architecture, digital signal processing, operating systems, data communications, and other related material. Computer engineering majors will focus on hardware design, communications and information systems, digital signal processing, and image processing.

Students in these programs are technological leaders in their fields. Employment opportunities range from nationally prominent corporations to small technology firms to financial firms. EECS graduates also frequently create their own companies and become entrepreneurs. Job prospects for students with a bachelor's degree in our programs are excellent. If you would like specific information on job fairs, salaries and career opportunities, visit the UT Career Services website at www.career.utk.edu.

State-of-the-art facilities

The Min H. Kao Electrical Engineering and Computer Science Building is the first new academic engineering facility on campus in nearly fifty years. It became home to EECS in 2012. The $37.5 million structure boasts six stories of laboratory, classroom, conference room, and office space.

World-class faculty

EECS has forty full-time faculty members who are all leaders in their fields. Each year they successfully compete for and receive prestigious awards and accolades. Their research and scholarship are not only helping keep the department on the cutting edge of its disciplines, but also teaching and training the engineers of tomorrow.

Academic advantages

The Office of Professional Practice offers opportunities for you to gain hands-on experience in business and industry through paid positions and internships: www.coop.utk.edu

The College of Engineering participates in the University Honors Program, which is designed to give academically outstanding students a unique undergraduate experience consisting of special courses, seminars, mentoring, and research projects: honors.utk.edu

The UT Center for International Education collaborates with the College of Engineering to create opportunities for engineering studies in other countries: web.utk.edu/~global

UT freshman engineering students, with the exception of computer science majors, are automatically enrolled in the innovative Engage Engineering Fundamentals Program. Here you will learn basic engineering concepts and teamwork skills though a series of hands-on projects and activities: www.engr.utk.edu/efd/