

Electrical Engineering | Bachelor's Degree

	FIRST YEAR	MIDDLE YEARS	LAST YEARS
ADVANCE your academic journey	Meet with a First Year Advisor to develop your academic planning. Participate in the Experiential Education Certificate Program. Visit TXST One Stop or BOSS for scholarship opportunities.	Visit the COSE Advising Center for guidance with successful degree completion, identifying resources, and help achieving academic, personal, and professional goals. Regularly check the curricula and flowchart pre-requisites and co-requisites for courses may change over time. Explore external scholarship opportunities such as the Fulbright Scholarship to take your expertise to unique locations abroad. Explore Campus Resources for academic and personal support.	Check your Degree Audit & meet with your academic advisor. Explore next steps including potential graduate programs. Complement your degree with a micro credential. Complete a capstone project related to major. Create and update a digital portfolio of academic work and experiences.
EXPAND your personal and social development	Review your degree plan for courses that include the Service-Learning Excellence program. Begin expanding your student experience by joining a student organization through the Bobcat Organization HUB.	Consult your academic advisor and learn about scholarship opportunities. Meet with an advisor in Education Abroad or Study in America to explore financial aid options. Expand your leadership skills through Student Involvement's Leadership & Service programming and workshops. Join engineering student organizations and collaborate on faculty-led research. Explore Ingram Hall Makerspace (ISoE) to apply your skills and bring ideas to life. Participate in The Big Event to give back to the regional community.	Select a service activity through Student Involvement to give back to the area community. Participate in Senior Design Day to showcase your skills. Attend a Student Government Senate meeting to contribute to the TXST community. Seek out a leadership role with the Leadership & Service.
ENRICH your practical competence	Explore the TXST One Stop for more information about the scholarships provided to new and continuing students. Attend an IDEA Center workshop to learn more about undergraduate research. Consider the STEM Communities Learning Assistance program.	Consider the Cooperative Education program to gain valuable real-world experience. Check out the Collaborative Learning Center's (CLC) computer lab, free walk-in STEM tutoring, and resources like a textbook library and TI-83+ calculators to enhance your learning. Learn about Global Career Accelerator options that give you experience with global companies and in-demand tech skills. Discover Global Online Learning Experiences for courses with culturally dynamic perspectives.	Join a professional organization in your major or passion. Attend a conference related to your major (get recommendations from a faculty) or your student organization. Deliver a presentation in a student conference, workshop, seminar or community organization.
ELEVATE your career and professional life	Complete your Career Assessments, such as Focus2. Create your Handshake profile. Create your LinkedIn profile and connect with colleagues and leaders. Develop and review your resume with Career Services.	Build Career & Graduate School Fairs into your schedule to ensure your connection maximum opportunities. Join Employer Information Sessions at Career Services or your department. Prepare to ace your job interviews with Career Services or your academic department.	Develop a full-time employment or graduate school plan with Career Services. Complete your First Destination Survey to share your post-graduation plans. Identify faculty and professional references.

OUTCOMES

Marketable Skills

Think critically

Analyze and solve problems

Communicate clearly and effectively

Develop and conduct appropriate experimentation, analyze data, and use engineering judgment to draw conclusions in areas such as robotics, microprocessors and embedded systems, networks, circuit design, chip design, multimedia systems, and programming

Function effectively on a team of engineers to invent, design and build devices such as digital systems and computers, control systems, microelectronics, communication systems and signal processing, robotics, and software applications

[See more marketable skills for this major](#)

Career Opportunities

Circuits engineer

Design engineer

Electrical controls engineer

Electrical design engineer

Electrical engineer

Electrical project engineer

Instrumentation and Electrical (I&E)

reliability engineer

Power systems engineer

Project engineer

Test engineer

Computer engineer

Microelectronics engineer

Telecommunications engineer

Experiences in Electrical Engineering

The bachelor of science degree with a major in electrical engineering is designed to provide students with the mathematics, science, management, engineering and applications skills needed to work in various industries designing and producing electrical and electronic devices, systems and services. Three specializations are available: networks and communications systems, micro and nano devices and systems, and computer engineering, which is a separately-accredited program within the electrical engineering program and for which a concentration is declared. Senior design or “capstone” activities incorporate appropriate engineering standards and multiple constraints and is based on knowledge and skills acquired in earlier course work. An optional cooperative education program is available or students may participate in internships which develop both design and industry awareness and expertise. Membership in student organizations, research initiatives and opportunities to apply for nationally recognized service activities contribute to their experience.