

# Electrical Engineering | Bachelor's Degree

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

## 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.