

# Mechanical 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</a> Program.</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>Meet with a faculty mentor or peer advisor.</p> <p>Complete a capstone project related to major.</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 toward learning in an international or national setting.</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>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>Develop your <a href="#">resume</a> with the help of the professionals at <a href="#">Career Services</a>.</p> <p>Report your internship offers to <a href="#">Career Services</a>.</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

Apply digital tools to develop new technologies to improve business and manufacturing operations. New technologies include robotics, additive manufacturing, and the Internet of Things (IoT)

Design or redesign mechanical and thermal devices or subsystems, using analysis and computer-aided design with consideration of public health, safety and welfare, as well as global, cultural, social, environmental and economic factors

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

### Career Opportunities

Automotive industry

Aerospace industry

Biomedical engineering industry

Oil and gas industry

Marine engineering industry

Nuclear industry

Home appliances industry

Mechanical engineer

Design engineer

Automation and robotics engineer

Control and instrumentation engineer

Test engineer

Mechanical maintenance engineer

Manufacturing engineer

HVAC design

Many more!

### Experiences in Mechanical Engineering

The bachelor of science with major in mechanical engineering, also known as ME4.0, is unique in Texas as it is developed around Industry 4.0 concepts. Students develop a strong foundation in traditional mechanical engineering principles combined with a unique education in designing and developing mechanical systems that are intelligent, interconnected, and integrated with the virtual world and emerging digital infrastructure. ME4.0 tools and technologies are embedded in courses, curriculum, and facilities. Students participate in internships and capstone projects which develop both design and industry awareness and expertise. Membership in student organizations, participation in research initiatives and opportunities to apply for nationally recognized service activities contribute to their experience.