A major in Electrical Engineering is designed to provide students with the mathematics, science, management, engineering, and applications skills needed to work in the various industries designing and producing electrical and electronic devices, systems, and services. A background in Electrical Engineering also prepares students to work in many large-scale multidisciplinary projects in aerospace, automobiles, computer systems, construction, instrumentation, health services, and other areas.

**Skills**
- Designing
- Complex Problem Solving
- Time Management
- Monitoring and Decision Making

**Areas of Specialization**
- Computer Engineering
- Micro and Nano Devices and Systems
- Networks and Communication Systems

**Possible Work Settings**
- Consumer Electronics Firms
- Electric Power Generation Companies
- Defense Contractors

**Degrees Offered at Texas State**
- B.S., Major in Electrical Engineering
- B.S., Major in Electrical Engineering with Micro and Nano Devices and Systems Specialization
- B.S., Major in Electrical Engineering with Networks and Communication Systems Specialization
- B.S., Major in Electrical Engineering with Computer Engineering Specialization

**Other Degrees and Certifications**
- BST, Major in Engineering Technology with Electrical Engineering Technology Specialization

**Career Paths**
(Some of the occupations outlined in this brochure may require additional education or training)

**In Manufacturing**

**Sample Job Titles**
- Electrical Engineer
- Systems Engineer
- Electrical Controls Systems Engineering Manager

**Possible Work Settings**
- Microprocessor Manufacturers
- Motor & Generator Manufacturers
- Digital Signal Processor Manufacturers

**In Wireless Telecommunications**

**Sample Job Titles**
- Electrical Project Engineer
- Electrical Test Engineer
- Circuits Engineer

**Possible Work Settings**
- Information Technology Services
- Wireless Telecommunications
- Telecommunications Equipment Manufacturing
In Research

Sample Job Titles

• Planning Engineer
• Electrical Research Engineer

Possible Work Settings

• Scientific Research & Development
• Defense Contractors
• Power Generation Companies

Resources

Student Organizations

• Texas State Institute of Electrical & Electronics Engineers Student Branch
• Society of Women Engineers
• Texas State Society of Manufacturing Engineers

State Organizations

• Central Texas Institute of Electrical & Electronics Engineers

National Organizations

• The Association of Computer Electronics and Electrical Engineers (ACEEE)
• Institute of Electrical and Electronics Engineers (IEEE)

Job Search Sites

• Glassdoor.com
• Dice.com
• Indeed.com
• Careeronestop.org
• Jobs4Cats

Career Library Resources

• Occupational Outlook Handbook
• Great Jobs for Engineering Majors
• Opportunities in Engineering Careers
• Insider Guide: Careers in Computer Software & Hardware
• Aviation and the Aerospace Industry

Information Compiled from:

• Engineering Go for It: http://www.egfi-k12.org/
• North Carolina State University Career Center
• Institute of Electrical and Electronics Engineers (IEEE)
• Texas State University-San Marcos Course Catalog