The College of Science and Engineering has a threefold mission:

To teach core concepts and promote literacy in science and mathematics for a diverse student body, while providing students with advanced knowledge and skills for careers in science, technology, engineering, mathematics, and related fields including education.

To support high-quality teaching and internationally recognized research programs in an inclusive, equitable, and accessible environment for students, staff, and faculty.

To serve the citizens of Texas and the nation with educational and research programs that embrace opportunities for innovation in solving regional and global challenges.

To ensure an understanding of basic scientific and engineering concepts, the college offers extensive opportunities for student participation. Students gain experience in laboratories, interact with the environment through field studies, conduct undergraduate research, participate in design experiences and train using technologically advanced instrumentation. A combination of student participation, rigorous classroom instruction, and hands on experiences gives majors a competitive advantage in career advancement or in the selection of professional or graduate programs. The non-science major is assured of adequate scientific knowledge to make informed decisions essential to citizens in a science-oriented, technological world.

The seven academic units in the College of Science and Engineering are the Departments of Biology, Chemistry and Biochemistry, Computer Science, Engineering Technology, Mathematics, Physics, and the Ingram School of Engineering.

Majors offered in the College include applied mathematics, aquatic biology, biochemistry, biology, chemistry, civil engineering, computer science, concrete industry management, construction science and management, electrical engineering, engineering technology, industrial engineering, manufacturing engineering, mathematics, mechanical engineering, microbiology, physics, and wildlife biology. In addition, pre-professional minors are available for students interested in applying to physician assistant, dentistry, medicine, or pharmacy programs. Four programs offer a double major with education for students who wish to teach in a secondary education program.

**Academic Advising Center**

The College of Science and Engineering Undergraduate Academic Advising Center advises current students on academic and administrative issues. Students are informed about matters related to academic general education core requirement, the selection of an appropriate major and minor, the selection of appropriate courses, transfer and correspondence courses, academic probation/suspension, the choice of an educational program leading to a bachelor's degree, and participation in pre-professional minors. The Advising Center is a resource for current students who are considering a major and/ or minor within the College of Science and Engineering and provides assistance for students applying for graduation. Career and professional counseling are available in the academic unit of the student's major and through Career Services.

**Teacher Certification**

Currently, there are four programs that offer a double major with education leading to the Texas science- and math-related teacher certification.

- Chemistry (double major with B.S. in Chemistry and Education)
- Life Sciences (double major with B.S. in Biology and Education)
- Mathematics (double major with B.S. in Mathematics and Education)
- Physics/Mathematics (double major with B.S. in Physics and Education)

Students interested in a double major with education are strongly encouraged to see a Science and Engineering Advisor early in their undergraduate program.

**Minors**

- Minor in Pre-Dental Studies (http://mycatalog.txstate.edu/undergraduate/science-engineering/pre-dental-minor/)
- Minor in Pre-Medical Studies (http://mycatalog.txstate.edu/undergraduate/science-engineering/pre-medical-minor/)
- Minor in Pre-Pharmacy Studies (http://mycatalog.txstate.edu/undergraduate/science-engineering/pre-pharmacy-minor/)
- Minor in Pre-Physician Assistant Studies (http://mycatalog.txstate.edu/undergraduate/science-engineering/pre-physasst-minor/)
- Minor in Pre-Veterinarian Studies (http://mycatalog.txstate.edu/undergraduate/science-engineering/pre-veterinarian-minor/)
- Second Teaching Field in Physical Science (Grades 6-12) (http://mycatalog.txstate.edu/undergraduate/science-engineering/second-teaching-field-physical-science/)