The College of Science and Engineering is committed to preparing students for careers in science, technology, engineering, mathematics, and health professions. The College offers a wide range of programs and majors, including interdisciplinary science, manufacturing management, electrical engineering, and computer science. The seven academic units in the College are Biology, Chemistry, Biochemistry, Computer Science, Mathematics, Engineering Technology, and the Ingram School of Engineering.

The College of Science and Engineering is dedicated to providing an environment in which faculty can develop and sustain nationally prominent research programs. The College serves the citizens of Texas and the nation with educational and research programs that facilitate innovation and economic development. 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, and participate in design experiences and training 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 an 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, Mathematics, Physics, Engineering Technology, and the Ingram School of Engineering. The College offers extensive opportunities for student participation. Students gain experience in laboratories, interact with the environment through field studies, conduct undergraduate research, and participate in design experiences and training 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 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 requirements, scholarships, and awards. The Advising Center is a resource for current students who are considering a science or engineering major or pre-professional concentration 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 six Texas science and math-related teacher certification programs available at Texas State University:

- Chemistry (B.S. major in Chemistry),
- Life Sciences (B.S. major in Biology),
- Mathematics (B.S. major in Mathematics),
- Physical Science (B.S. major in Chemistry or a B.S. major in Physics),
- Physics/Mathematics (B.S. major in Physics), and
- Science (B.S. major in Interdisciplinary Science),

Students seeking any of these certifications need to follow coursework leading to a degree in the appropriate science field, in addition to taking the required certification courses. Relevant information can be found within each departmental section of the catalog. Initial or additional certification may also be acquired as a post-baccalaureate or graduate student.

Students interested in certification are strongly encouraged to see the Science and Engineering Advisor early in their undergraduate program or certification process.

The Bachelor of Science (B.S.) major in Interdisciplinary Science is designed to broadly train students in a wide spectrum of science disciplines in preparation for the Science teacher certification exam for grades 7 through 12. Admission into the program requires both admission to the university and to the Educator Preparation Program. The Educator Preparation Program admittance requirements are found in the College of Education section of this catalog. Students successfully completing the program and the Science teacher certification exam will be prepared to teach any high school science subject and in informal science educational settings within communities. There is a high job market need for science teachers nationally and in Texas. Students must enroll and complete all of the required courses in the following degree plan in order to sit for the teacher certification exam.
Bachelor of Science (B.S.)

- Major in Interdisciplinary Studies (Teacher Certification in Science, Grades 7-12) [http://mycatalog.txstate.edu/undergraduate/science-engineering/interdisciplinary-teacher-certification-grades-7-12-bs/](http://mycatalog.txstate.edu/undergraduate/science-engineering/interdisciplinary-teacher-certification-grades-7-12-bs/)

Minors

- Second Teaching Field in Physical Science (Grades 6-12) [http://mycatalog.txstate.edu/undergraduate/science-engineering/second-teaching-field-physical-science/](http://mycatalog.txstate.edu/undergraduate/science-engineering/second-teaching-field-physical-science/)