9. COLLEGE OF SCIENCES

Mission Statement

The College of Sciences is committed to preparing the next generation of scientists and researchers, science leaders, and science educators. The College of Sciences aims to: 1) Advance scientific literacy through excellence in education and community outreach; 2) Conduct cutting-edge research to expand the frontiers of science and mathematics; 3) Establish broad partnerships to enhance scientific competence at all levels; 4) Provide leadership in the education of underrepresented and disadvantaged groups; and 5) Support the engagement of faculty and students in global partnerships linked to science and education.

Vision Statement

The College of Sciences envisions itself as a leading institution of higher learning in sciences and mathematics with local and global impact.

General Information

The College of Sciences is made up of eight departments: Chemistry (http://catalog.utsa.edu/undergraduate/sciences/chemistry/); Computer Science (http://catalog.utsa.edu/undergraduate/ sciences/computerscience/); Earth and Planetary Sciences (http:// catalog.utsa.edu/undergraduate/sciences/earthandplanetarysciences/); Integrative Biology (http://catalog.utsa.edu/undergraduate/ sciences/integrativebiology/); Mathematics (http://catalog.utsa.edu/ undergraduate/sciences/mathematics/); Molecular Microbiology and Immunology (http://catalog.utsa.edu/undergraduate/sciences/ molecularmicrobiologyimmunology/); Neuroscience, Developmental and Regenerative Biology (http://catalog.utsa.edu/undergraduate/sciences/ neuroscience/); and Physics and Astronomy (http://catalog.utsa.edu/ undergraduate/sciences/physicsandastronomy/). Faculty in the College of Sciences are nationally and internationally recognized researchers and leaders in their field whose work has both local and global impacts. The College offers state-of-the-art facilities and equipment for research and teaching activities. Students will also have opportunities to collaborate with faculty and researchers across the university as well as industry partners. The College of Sciences is a major collaborator with the UTSA School of Data Science with the departments of Computer Science and Mathematics serving as constituent departments.

The College of Sciences is dedicated to supporting students throughout their academic careers at UTSA as they build and grow their science identity. COS offers a variety of scholarships (https://sciences.utsa.edu/student/scholarships.html), opportunities to participate in STEM Programs (https://sciences.utsa.edu/about/stem.html), and research (https://sciences.utsa.edu/research/) endeavors. Furthermore, our COS Student Success Center (https://sciences.utsa.edu/student/) is a comprehensive resource center for all science students. For more information related to the College, visit the main webpage at https://sciences.utsa.edu/.

Admission to the College of Sciences

Applicants to a major in the College of Sciences must meet all UTSA undergraduate admissions requirements as well as any department-specific criteria for direct admission. See the Department of Chemistry (http://catalog.utsa.edu/undergraduate/sciences/chemistry/) and the Department of Computer Science (http://catalog.utsa.edu/

undergraduate/sciences/computerscience/) catalog sections for their respective direct admission criteria.

Degree Programs

The College offers 18 undergraduate degree programs and nine minors. See individual department catalog sections for more information about these undergraduate programs.

Department	Degrees	Minors
Chemistry	B.S. Biochemistry B.S. Chemistry B.A. Chemistry	Chemistry
Computer Science	B.S. Computer Science B.A. Computer Science with Teaching Track	Computer Science
Earth and Planetary Sciences	B.S. Geosciences B.A. Geosciences	Geology
Integrative Biology	B.S. Biology B.S. Environmental Science B.A. Environmental Studies B.S. Multidisciplinary Science	Biology Environmental Science
Mathematics	B.S. Mathematics B.S. Mathematics for Teaching B.S. Mathematics of Data and Computing	Mathematics
Molecular Microbiology and Immunology	B.S. Microbiology and Immunology	
Neuroscience, Developmental and Regenerative Biology	B.S. Neuroscience	Neuroscience
Physics and Astronomy	B.S. Physics B.A. Physics	Astronomy/ Astrophysics

UTeachSA - Secondary STEM Teacher Preparation Program

Physics

UTeachSA is the preparation program in the College of Sciences that prepares students to become secondary (middle school and high school) science and mathematics teachers. Students earn a College of Sciences degree while also taking education courses leading to certification with the following options: 8-12 Computer Science, 7-12 Life Sciences, 7-12 Science (Composite), 7-12 Mathematics, and 6-12 Physical Science. UTeachSA currently offers the following teacher preparation degrees as outlined in the catalog: B.S. Biology with 7-12 Biology Teacher Certification, B.A. Computer Science with Teaching Track, B.S. Multidisciplinary Science, B.S. Mathematics for Teaching, and B.A. Physics with 6-12 Physical Science Teacher Certification Track.

UTeachSA is a collaborative effort between the College of Sciences and the College of Education and Human Development. Students interested in becoming a secondary STEM teacher should contact the UTeachSA program (https://www.utsa.edu/UTeachSA/).

College of Sciences Distinction in Research

The College of Sciences Distinction in Research (https://www.utsa.edu/ sciences/research/dir.html) program offers an opportunity for outstanding students to do advanced study and research under close faculty supervision for two semesters. At the conclusion of those two semesters, students are expected to have produced a highquality research paper/thesis. Students who successfully complete the requirements earn the "College of Sciences Distinction in Research" notation on their transcript.

The College of Sciences Distinction in Research is housed within the College of Sciences and is not affiliated with the Honors College/ COS Honors Program. This means that all College of Sciences undergraduate students meeting the requirements are eligible to participate. Students who enjoy research, plan to pursue a research-intensive career, or want to attend a STEM graduate program are encouraged to participate in this program. Interested students can contact the College of Sciences Dean's office or their major department with any questions.

To be eligible to pursue the College of Sciences Distinction in Research, students must be a College of Sciences major, have a cumulative grade point average of 3.0 or greater, have a major grade point average of 3.0 or greater, and should be in or near their last two semesters of coursework. Students are expected to enroll in the appropriate Honors Research course each of those two semesters. A minimum grade point average of 3.0 or greater must be maintained through those courses. Ultimately, approval for receiving this notation is based on the student's academic performance, the quality of the research paper/ thesis produced, and recommendation by the faculty of the student's major discipline, the Department Chair, and the Associate Dean for Undergraduate Studies in the College of Sciences.