# **COLLEGE OF SCIENCES**

The College of Sciences' mission, vision, and core values statements reflect the purpose of our college (Mission), what we aspire to be (Vision), and the guiding principles that we will use to reach our goals (Core Values).

### **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 competency 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: Biology, Health, and the Environment (https://catalog.utsa.edu/graduate/ sciences/biology/); Chemistry (https://catalog.utsa.edu/ graduate/sciences/chemistry/); Computer Science (https:// catalog.utsa.edu/graduate/sciences/computerscience/); Earth and Planetary Sciences (https://catalog.utsa.edu/graduate/sciences/ earthandplanetarysciences/); Mathematics (https://catalog.utsa.edu/ graduate/sciences/mathematics/); Molecular Microbiology and Immunology (https://catalog.utsa.edu/graduate/sciences/ molecularmicrobiologyimmunology/); Neuroscience, Developmental and Regenerative Biology (https://catalog.utsa.edu/graduate/sciences/ neuroscience/): and Physics and Astronomy (https://catalog.utsa.edu/ graduate/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.

Research is an important part of advancing knowledge and educating our students. Students who participate in research develop greater problem-solving skills as well as increased confidence and independence and are more competitive graduates. Our departments are aligned with numerous research centers and institutes, including the South Texas Center for Emerging Infectious Diseases (https://sciences.utsa.edu/ stceid/), the Center for Infrastructure Assurance and Security (https:// cias.utsa.edu/), the Artificial Intelligence Consortium (Matrix AI) (https:// ai.utsa.edu/), the Brain Health Consortium (https://www.utsa.edu/bhc/), the Institute for Cyber Security (https://ics.utsa.edu/), the Institute for Water Research, Sustainability and Policy (https://sciences.utsa.edu/ iwrsp/), NASA MIRO Center for Advanced Measurements in Extreme Environments (https://www.utsa.edu/NASA-CAMEE/), and the Center for Innovative Drug Discovery (https://utcidd.org/). We are also part of UTSA's National Security Collaboration Center (https://nscc.utsa.edu/), an impactful government-university-industry ecosystem focused on cybersecurity, data analytics, and cloud computing. Through experiential learning and ground-breaking research, our expert faculty help students use their skills to make a difference.

For more information related to the College, visit the main College of Sciences website (https://sciences.utsa.edu/).

# **Degree and Certificate Programs**

The College of Sciences offers 11 master's degree programs, 7 doctoral degree programs, and 4 graduate certificate programs:

# Department of Biology, Health, and the Environment (https://catalog.utsa.edu/graduate/sciences/biology/)

- Master of Science in Biology (https://catalog.utsa.edu/graduate/ sciences/biology/#degreestext)
- Master of Science in Environmental Science (https:// catalog.utsa.edu/graduate/sciences/biology/#degreestext)
- Doctor of Philosophy in Environmental Science and Engineering (https://catalog.utsa.edu/graduate/sciences/biology/#degreestext) (School of Civil and Environmental Engineering, and Construction Management)
- Graduate Certificate in Environmental Science (https:// catalog.utsa.edu/graduate/sciences/biology/#certificatestext)
- Graduate Certificate in Environmental Sustainability (https:// catalog.utsa.edu/graduate/sciences/biology/#certificatestext)

#### Department of Chemistry (https://catalog.utsa.edu/ graduate/sciences/chemistry/)

- Master of Science in Chemistry (https://catalog.utsa.edu/graduate/ sciences/chemistry/#degreestext)
- Doctor of Philosophy in Chemistry (https://catalog.utsa.edu/ graduate/sciences/chemistry/#degreestext)

#### Department of Computer Science (https:// catalog.utsa.edu/graduate/sciences/computerscience/)

- Master of Science in Artificial Intelligence (https://catalog.utsa.edu/ graduate/translationalscience/#degreestext) (University College)
- Master of Science in Computer Science (https://catalog.utsa.edu/ graduate/sciences/computerscience/#degreestext)
- Master of Science in Cybersecurity Science (https:// catalog.utsa.edu/graduate/sciences/computerscience/#degreestext)
- Doctor of Philosophy in Computer Science (https://catalog.utsa.edu/ graduate/sciences/computerscience/#degreestext)
- Graduate Certificate in Cloud Computing (https://catalog.utsa.edu/ graduate/sciences/computerscience/#certificatestext)

#### Department of Earth and Planetary Sciences (https://catalog.utsa.edu/graduate/sciences/ earthandplanetarysciences/)

- Master of Science in Geosciences (https://catalog.utsa.edu/ graduate/sciences/earthandplanetarysciences/#degreestext)
- Master of Science in Geoinformatics (https://catalog.utsa.edu/ graduate/sciences/earthandplanetarysciences/#degreestext)
- Doctor of Philosophy in Environmental Science and Engineering (https://catalog.utsa.edu/graduate/engineeringintegrateddesign/ civilenvironengr-constructionmgt/#degreestext) (School of Civil and Environmental Engineering, and Construction Management)

• Graduate Certificate of Professional Development in Geographic Information Science (https://catalog.utsa.edu/graduate/sciences/ earthandplanetarysciences/#certificatestext)

#### Department of Mathematics (https://catalog.utsa.edu/ graduate/sciences/mathematics/)

• Master of Science in Mathematics (https://catalog.utsa.edu/ graduate/sciences/mathematics/#degreestext)

#### Department of Molecular Microbiology and Immunology (https://catalog.utsa.edu/graduate/sciences/ molecularmicrobiologyimmunology/)

- Master of Science in Biotechnology (https://catalog.utsa.edu/ graduate/sciences/molecularmicrobiologyimmunology/ #degreestext)
- Doctor of Philosophy in Molecular Microbiology and Immunology (https://catalog.utsa.edu/graduate/sciences/ molecularmicrobiologyimmunology/#degreestext)

#### Department of Neuroscience, Developmental and Regenerative Biology (https://catalog.utsa.edu/ graduate/sciences/neuroscience/#text)

- Doctor of Philosophy in Developmental and Regenerative Sciences (https://catalog.utsa.edu/graduate/sciences/neuroscience/ #degreestext)
- Doctor of Philosophy in Neuroscience (https://catalog.utsa.edu/ graduate/sciences/neuroscience/#degreestext)

#### Department of Physics and Astronomy (https://catalog.utsa.edu/graduate/sciences/ physicsandastronomy/)

- Master of Science in Physics (https://catalog.utsa.edu/graduate/ sciences/physicsandastronomy/#degreestext)
- Doctor of Philosophy in Physics (https://catalog.utsa.edu/graduate/ sciences/physicsandastronomy/#degreestext)