

**TEXAS TECH UNIVERSITY
STEM CENTER FOR OUTREACH, RESEARCH, AND EDUCATION
(STEM CORE)**

**SCOPE AND STUCTURE
(edited November 2023)**

VISION

STEM CORE will be a nationally recognized entity that performs and facilitates collaborative and interdisciplinary activities in STEM education, outreach, and research.

MISSION

The mission of STEM CORE is to integrate and deepen the impact and intersectionality of STEM education, outreach, and research in West Texas and the Lubbock region.

SCOPE

The scope for STEM CORE is derived from its vision and mission towards STEM education, outreach, and research. All three are weighted equally within the scope of STEM CORE and includes training and professional development. The activities of STEM CORE are in service to and in collaboration with our stakeholders. Stakeholders include, but are not limited to, Texas Tech University faculty, staff, and administrators, undergraduate and graduate students, K-12 educators, and informal science community partners.

Although STEM CORE aims to have a role at the national level in STEM issues, the primary mission of STEM CORE is to improve STEM outreach, research, and education at Texas Tech University and surrounding communities. STEM CORE acts to facilitate interaction, community, and knowledge development in outreach, research, and educational activities among stakeholders.

Our primary functions include the following: 1) providing a service to faculty related to grant proposal writing and broader impacts consultations; 2) stimulating and sustaining the development of an inclusive and diverse STEM population on campus; 3) facilitating strategic K-12 outreach; 4) serving as a central hub to culminate and coordinate STEM activities across campus.

The mission of STEM CORE includes, but is not restricted to:

OUTREACH: STEM CORE facilitates and coordinates outreach between Texas Tech University faculty and staff and K-12 and additional STEM stakeholders. Specifically of focus is introducing K-12 students to STEM concepts, careers and educational pathways.

RESEARCH: STEM CORE helps to identify individuals and facilitate interdisciplinary teams in the development of ideas, research projects, and grants, and aids in the creation of broader impact statements for STEM grants. STEM CORE also provides grant support for faculty and conducts research and produces scholarship around community engaged projects. STEM CORE will actively facilitate sustainability efforts.

EDUCATION: STEM CORE furthers undergraduate and graduate opportunities in the areas of STEM education and education research. STEM CORE runs the LSAMP Scholars program and the Undergraduate STEM Center, which serves as a resource to all STEM students. STEM CORE coordinates educational opportunities and support such as, to topical seminars, professional development and training, and models of STEM learning, open to all STEM students.

STRUCTURE

STEM CORE is composed of specific stakeholder groups. The stakeholders can be grouped broadly according to their functions: (1) internal oversight and (2) practitioners. The stakeholder groups are delineated below:

Internal Oversight: This group includes the Director, Associate Directors, and STEM CORE staff. The group will meet at regular intervals (generally monthly) and is charged to:

- Enable and foster teams for multidisciplinary outreach, research, and education
- Facilitate grants for research and education in STEM
- Assist others in grant development through broader impacts and letters of support
- Plan and administer outreach activities, and support faculty who are doing the same
- Support and provide educational opportunities for underrepresented students in STEM
- Disseminate research and scholarship results through scholarly outputs
- Grow the STEM CORE network across and beyond Texas Tech
- Administer budget and financial aspects of programs, grants and the Center
- Interact with and inform Texas Tech upper administration in areas of STEM outreach, research and education.

In addition to the list above, the Director will oversee the general activities of STEM CORE and have fiduciary responsibilities for the center.

The number of Associate Directors shall be no less than six typically composed of faculty members from the following: one to two (1-2) from the College of Arts and Sciences, one (1) from the College of Education, one (1) from the College of Engineering, one to two (1-2) from the Davis College of Agricultural Science and Natural Resources, and one (1) from the College of Human Sciences.

The duties of the STEM CORE Associate Directors include, but are not limited to:

- Support grant writing in STEM areas
- Coordinate monthly meetings
- Support the development of STEM outreach, research, and education by participating in events
- Act as a liaison between STEM CORE and affiliated departments and colleges
- Maintain historical information related to STEM CORE and general STEM activities on campus
- Participate with the Undergraduate STEM Center by promoting and using events

The duties of the STEM CORE staff include, but are not limited to:

- Help to develop, coordinate, and facilitate new and existing outreach programs and educational resources
- Support grant writing in STEM areas
- Website and social media design and implementation
- Administer budget and financial aspects of programs, grants and the Center
- Assist, facilitate, and support the development of STEM outreach, research, and education grants that are supported by the Center
- Act as a liaison between STEM CORE and its constituency groups
- Maintain historical information related to STEM CORE and general STEM activities on campus
- Review and affirm membership applicants; send acceptance information
- Administer the LSAMP Scholars Program and the Undergraduate STEM Center

Practitioners: Four groups of practitioners exist as a part of STEM CORE stakeholders. These practitioners work with STEM CORE to offer a variety of support and engagement with different groups that STEM CORE serves. Practitioners do not have influence on STEM CORE's roles, but serve as partners in serving together to accomplish one goal.

a) TTU Membership: Membership is comprised of three categories. The description of these categories are included below.

a. Affiliates: Affiliates are faculty and staff who wish to be involved with STEM CORE in a peripheral manner, or who wish to utilize the resources, both physical and intellectual, of the Center. In order to be an affiliate, one is expected to fulfill the following requirements:

- i. Have identified oneself as being interested in the mission and vision of STEM CORE through sign up on the STEM CORE website
- ii. Have attended at least one STEM CORE activity within a calendar year

b. Members: In order to be a general member of STEM CORE, faculty or staff are expected to meet the affiliate requirements and regularly fulfill at least two of the three requirements:

- i. Submit or be a part of a submission of at least one STEM, STEM education, or STEM outreach grant
- ii. Develop or be engaged in at least one STEM outreach activity or program
- iii. Attend STEM CORE activities

c. Fellows: STEM CORE Fellows are expected to have a vested interest in the mission and vision of STEM CORE, and to go above and beyond the requirements for membership. In order to become a Fellow, the faculty or staff member must have the approval of the Director and Associate Directors and fulfill all of the requirements to be a regular member and one or both of items below:

- i. Have a recognizable track record in STEM research, education, or outreach funding
- ii. Have a track record of sustained STEM outreach activity and consistently reported on its efficacy at a regional or national meeting or published the results in a peer-reviewed journal

- b) Informal STEM Practitioners:** Informal STEM practitioners engage with STEM CORE through partnership of offering programs, support of resources and opportunities and relationships with STEM CORE to offer a more robust experience for the end user.
- c) K-12 Schools, Districts, Students and Teachers:** K-12 stakeholders engage with STEM CORE by attending events, helping bring in additional funding from programming, and help refine procedures, skills and events offered. This group participates in a large part of the outreach opportunities on campus, but STEM CORE will occasionally attend events in their off-campus locations.
- d) Community College Students, Instructors and Administrators:** Community College stakeholders benefit from engaging with STEM CORE, as their students are transitioning to TTU. STEM CORE not only welcomes their students, but provides tutoring and mentorship support for their students. STEM CORE is looking for additional connections and relationships to expand the number of community college stakeholders we can serve.