

College of Science & Engineering Technology

FY 2026 Strategic Plan Alignment and Budget Presentation

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College of Science and Engineering Technology

- School of Agricultural Sciences
- Departments of
 - Biological Sciences
 - Chemistry
 - Computer Science
 - Engineering Technology
 - Environmental and Geosciences
 - Mathematics and Statistics
 - Physics and Astronomy
- Centers and Facilities
 - STEM Center
 - Cyber Forensics Intelligence Center
 - Gibbs Ranch
 - Dominey Observatory
 - Pinewoods Experimental Research Laboratory (PERL)
 - Natural History Collections

FY 2025 Accomplishments

Priority 1: Prioritize Student Success and Student Access

- **Enrollment:** Fall 2025 graduate headcount rose 3.5%. Spring 2025 undergraduate headcount rose 1.5% and graduate headcount rose 10.1%.
- **Retention:** Pass rates improved in BIOL 1408 (3%), CHEM 1411 (2%), GEOL 1404 (7%), MATH 1314 (11%), and MATH 1420 (8%).
- **Enrollment:** Initiated several new interdisciplinary degrees: MS in Engineering Technology and Management, BS in Integrated Studies - Environmental and Occupational Health, BS in Integrated Studies - Land and Urban Property Development, Certificate in Gulf Studies.
- **Completion:** STEM Center developed programming to support STEM majors, including Catapult into STEM, Career Mindset Enhancement, and Ramps into Internships and Research.
- **Enrollment:** COSET began MOUs with HCC-Katy, international universities, and the Washington Center for Internships and Academic Seminars.

FY 2025 Accomplishments

Priority 2: Embody a Culture of Excellence

- **Research Excellence:** Faculty and staff secured ~\$8.2M in external research funding.
- **Academic Excellence:** The Electronics and Computer Engineering Technology program is on track to be granted accreditation from ABET Engineering Technology Accreditation Commission in summer 2025. Four Engineering Technology programs earned ATMAE accreditation. ABET accreditation renewed for Computing Science and initiated it for Software Engineering.
- **Academic Excellence:** Computer Science, the Cyber Forensics Intelligence Center, and IT launched the SHSU Security Operations Center.

FY 2025 Accomplishments

Priority 3: Elevate the Reputation and Visibility of SHSU

- **Community Engagement:** The Physics and Astronomy Dominey Observatory has hosted approximately 936 visitors through field trips, home school organizations, clubs, church, and professional organizations.
- **Research Excellence:** Faculty hosted high-profile conferences like the Conference of Texas Statisticians and the Mitchell Institute Collider, Dark Matter, and Neutrino Physics Workshop.

FY 2025 Accomplishments

Priority 4: Expand and Elevate our Service to the State and Beyond

- **Educational Impact:** Through Biological Sciences and Autism Unites, approximately 15 SHSU students offer biology lab experiences twice a month to Texas Autism Academy students. Three SHSU students are leading a garden project there. Together with the Garrett Center, they are now partnering with Grimes ISD.
- **Educational Impact:** The School of Agricultural Sciences hosted approximately 4800 high school students for leadership and career development events.
- **Educational Impact:** Engineering Technology hosted its second Bearkat STEM Camp for 86 high school students, fully funded by a Texas Workforce Commission grant.
- **Community Impact:** COSET students and faculty provided \$755,200 in economic impact through 22,550 hours of service in 45 ACE courses.

FY 2026 Keep Doing

Statement:

COSET will keep developing more in-demand, industry-driven curriculum because COSET has the expertise to offer degrees in areas of strength with high employment demand. This action aligns with Strategy 1: Prioritize student success and student access and Goal 1.1 Recruit, retain, graduate, and empower students. It will have a positive impact on enrollment growth to achieve Pillar 1 – Enrollment.

Supporting Data:

- This action supports COSET Strategic Objectives 2.2 a – c and requests from both university and external partners.
- Many careers that require STEM degrees are projected to grow over 20% in the next 8 years.
(<https://www.bls.gov/ooh/fastest-growing.htm>,
<https://money.usnews.com/money/careers/articles/the-25-best-jobs>)

Resources / Collaborations Required:

- Industry advisory boards
- Academic Planning and Development
- College partners

FY 2026 Keep Doing

Statement:

COSET will keep expanding student engagement activities for majors because retention of majors is a priority. This action aligns with Strategy 1: Prioritize student success and student access and Goal 1.1 Recruit, retain, graduate, and empower students. It will have a positive impact on retention to achieve Pillar 2 – Retention.

Supporting Data:

- Supports COSET Strategic Objectives 1.2c, 1.3 c & e, 2.4a, 3.3 a & b
- All COSET level Keep, Stop, Start survey responses requested continues STEM Center support

Resources / Collaborations Required:

- STEM Center
- Academic Success Center
- COSET Student Ambassadors
- COSET Student Government Association members

FY 2026 Stop Doing

Statement:

COSET will stop overdependence on faculty to manage grant funding because the workload burden directly on grant active faculty has grown. This action aligns with Strategy 2: Embody a culture of excellence and Goal 2.2 Align processes and resources. It will have a positive impact on funding levels and faculty morale to achieve Pillar 4 – Agility.

Supporting Data:

- Supports COSET Strategic Objective 2.3c, faculty direct requests, and 1 Keep, Stop, Start survey response.
- Faculty grant funding increased by ~\$1.3M in FY25. Grant management has become more difficult.

Resources / Collaborations Required:

- Dean's Office staff time, funded by reallocating workload to the newly hired marketing and communications specialist.
- Office of Research Administration

FY 2026 Stop Doing

Statement:

COSET will stop college-funded digital marketing because funding will be focused on graduate scholarships and compensation of graduate advisors. This action aligns with Strategy 1: Prioritize Student Success and Student Access and Goal 1.1 – Recruit, retain, graduate and empower students. It will have a positive impact on graduate enrollment and faculty morale to achieve Pillar 1 – Enrollment.

Supporting Data:

- Supports COSET Strategic Objectives 1.2a, 2.1a, 2.4 b & d.
- To attract out-of-state and international students will require scholarships that allow in-state tuition.
- COSET graduate programs vary in size and workload required by advisors.
- Digital marketing efforts have had little return on investment.

Resources / Collaborations Required:

- COSET funds through distance learning fees and incentive compensation funds
- COSET graduate advisors

FY 2026 Stop Doing

Statement:

COSET will stop operating with out-of-date facilities, equipment, and supplies because these facilities are vital to student and faculty retention. This action aligns with Strategy 2: Embody a culture of excellence and Goal 2.1 – Academic excellence. It will have a positive impact on enrollment and faculty morale to achieve Pillar 1 – Enrollment.

Supporting Data:

- Supports COSET Strategic Objectives 1.2a, 2.1a, 2.4 b & d

Resources / Collaborations Required:

- COSET distance learning and indirect cost recovery funds

FY 2026 Start Doing

Statement:

COSET will start expanding the SHSU Security Operations Center to offer cyber security support to partners beyond SHSU because this serves the community, raises the profile of the cyber security program, increases student career preparation, and attracts partners. This action aligns with Strategy 4: Expand and elevate our service to the State and beyond and Goal 4.4 – Establish community engagement as a signature of high-impact practice. It will have a positive impact on external partnerships, placement of students, and research opportunities for faculty to achieve Pillar 4 – Agility.

Supporting Data:

- Supports COSET Strategic Objective 4.1a and requests by local, state, and federal officials
- Serves regional cyber security.

Resources / Collaborations Required:

- University, college, state, and/or federal funds
- Texas Department of Information Resources
- Local municipalities, county offices, and federal agencies

Science & Engineering Technology Summary

Keep Doing

- Keep #1:** Developing new relevant, in-demand, industry-driven curriculum
- Keep #2:** Expanding student engagement activities

Stop Doing

- Stop #1:** Overdependence on faculty to manage grant funding
- Stop #2:** College-funded digital marketing campaigns
- Stop #3:** Operating with out-of-date facilities, equipment, and supplies

Start Doing

- Start #1:** Offering cyber security support to partners beyond SHSU

Questions?