

College of Science & Engineering

Strategic Plan 2022

Our Mission

We prepare students with scientific, quantitative, and technological knowledge, skill sets and experiences that empower them to excel in their careers, be responsible citizens, and lead fulfilling lives.

Our Vision

We create transformative educational experiences that are responsive to the needs of students, society, and the world.

Our Core Commitments

Students first
Stewardship of Place
Inclusive Excellence, Diversity, and Equity
Commitment to Our Husky Compact
Teaching Excellence
Hands-on, Experiential Application of Knowledge
Faculty and Student Scholarship
Collaboration and Innovation

Our Strategic Imperatives for 2022

1. Develop a responsive and sustainable portfolio of programs in conjunction with our commitment to stewardship of place
2. Develop a compelling and distinctive COSE brand to grow enrollment and increase external support
3. Establish College and program expectations and implementation of teaching effectiveness
4. Deepen pride, belonging, and engagement by fostering a culture of excellence and inclusion to attract and retain a diverse body of students, faculty, and staff.

Imperative 1: Develop a responsive and sustainable portfolio of programs in conjunction with our commitment to stewardship of place

Strategic Objectives:

Objective 1.A: Continuously track program quality, demand, and trends and use as a basis for program development, improvement and resource allocation

- 1.A.1. Explore new models on the credentialing spectrum such as certificates and badges. Adapt programs and course delivery to meet the needs of emerging student groups and demographics, including online, hybrid, blended, satellite campus, and other innovative delivery strategies.
- 1.A.2. Build partnerships with two-year colleges in regions where new student groups and underserved student populations are present, including clear course transfer pathways, degree maps, and degree completion strategies at 2-year campuses
- 1.A.3. Adapt and apply program portfolio rubric regularly
- 1.A.4. Build partnerships with international institutions sharing our vision, values, and goals to enhance existing and to create new course and program offerings and to broaden research partnerships.

Objective 1.B: Continually enhance successful career preparedness for all COSE students

- 1.B.1. Develop, conduct and publicize surveys of student confidence in their career preparedness
- 1.B.2. Develop a holistic plan for soft skill development with collaboration with programs from Liberal Arts
- 1.B.3. Conduct and publicize surveys of employer satisfaction.
- 1.B.4. Expand the number of COSE students that work on projects with external partners.
- 1.B.5. Develop plans and report on enhancement of lifelong learning ability such as experiential learning and discovery based learning opportunities.
- 1.B.6. Develop program-level Preparedness for Successful Career and Citizenship Success Maps and actively utilize them in recruiting, comprehensive advising, assessment and marketing of our graduates.

Objective 1.C: Ensure higher level external guidance for COSE strategic positioning

- 1.C.1. Continue annual meetings and collecting feedback from external advisory groups and incorporate suggestions into curriculum.
- 1.C.2. Form and conduct meeting(s) for COSE Advisory Board

General Metrics:

- % of COSE students participating in external projects
- Enrollment from new programs and delivery modes
- Results of the above surveys.

Imperative 2: Develop a compelling and distinctive COSE brand to grow enrollment and increase external support

Strategic Objectives:

Objective 2.A: Create a branding and marketing plan to brighten COSE's distinctiveness

- 2.A.1. Identify SCSU graduates working in key K-12 districts and equip them to be effective COSE ambassadors
- 2.A.2. Improve collaboration with University Communications and University Advancement so that positive COSE activities and achievements are broadcast to a wider audience
- 2.A.3. Develop a consistent message for each of our target audiences and a mechanism for training each member of COSE to deliver those messages effectively.

Objective 2.B: Create an effective recruitment plans for COSE and its programs

- 2.B.1. Identify outreach strategies that will maximize COSE's exposure to prospective students and focus marketing resources towards these strategies
- 2.B.2. Develop and approve transfer pathways for as many two-year programs as possible.
- 2.B.3. Refine and improve implementation of activities related to Discover Red & Black, Preview Days, Admitted Student Days, International Advising Days, and Advising and Registration.
- 2.B.4. Develop and implement plan to enhance Transfer Advising Days.

Objective 2.C: Shape and actively manage image of COSE and its programs to all stakeholders

- 2.C.1. Establish a COSE advisory board to assist in fundraising, marketing and communications strategy.
- 2.C.2. Create a centralized clearinghouse for just in time reporting of faculty and staff accomplishments for internal and external promotion.
- 2.C.3. Proactively deliver messaging on COSE activities to alumni. Request alumni help in key college initiatives.
- 2.C.4. Demonstrate to faculty and staff the impact of COSE's brand and recognize their role in fostering the positive impacts that COSE produces.

Objective 2.D: Regularly collect data to supporting COSE marketing and improvement efforts

- 2.D.1. Identify current students who can provide strong testimonials for the COSE experience, and integrate those student voices into messaging.
- 2.D.2. Conduct and publicize surveys of employer satisfaction.
- 2.D.3. Conduct and publicize surveys of student satisfaction.
- 2.D.4. Record internship activity, REUs, and other appropriate student experiential learning opportunities in the Jobs for Huskies system
- 2.D.5. Catalog collaboration and partnership activity in ISELF and throughout COSE ; assess space usage annually
- 2.D.6. Create a simple database for quarterly reporting of collaboration with external partners

- 2.D.7. Create a process for cataloging COSE outreach activities and an annual review for sustainability
- 2.D.8. Investigate negative perceptions of COSE that may or may not exist amongst the general public, explore those perceptions, and develop strategies to change them
- 2.D.9. Leverage student insights and resources in the development of new marketing strategies and tactics

General Metrics:

- New enrollment overall and by program
- Employer satisfaction overall and by program
- External support (fundraising, contracts and grants)
- Graduate placement rates by program

Imperative 3: Establish College and program expectations and implementation of teaching effectiveness

Strategic Objectives:

Objective 3.A: Provide faculty pedagogical professional development

- 3.A.1. Develop a mentoring and pedagogical support program.
- 3.A.2. Require new probationary and FTNP faculty to participate in a mentoring and pedagogical support program for the first three years of their appointment.
- 3.A.3. Continue work on the Gateway Course Initiative.
- 3.A.4. Create COSE STEM Teaching and Learning Institute with focus on Student Success, P-12 and Community Outreach, and Faculty Development.

Objective 3.B: Engage students in improving teaching effectiveness

- 3.B.1. Provide opportunities for student feedback on teaching effectiveness at the program level.
- 3.B.2. Centralize all tutoring and learning assistant programs under the COSE Tutoring and LA Coordinator.
- 3.B.3. Conduct a survey to gather students' perception of teaching effectiveness.
- 3.B.4. Dedicate portion of student advisory board time to providing feedback on teaching effectiveness, learning assistants, tutoring and other student success initiatives.

Objective 3.C: Improve accountability for teaching effectiveness for faculty, administration, programs and rubrics

- 3.C.1. Include expectations of teaching effectiveness in all NOV's.
- 3.C.2. Share program evaluation and assessment results with key stakeholders.
- 3.C.3. During campus interview, require a teaching demonstration for all candidates for faculty positions. New FTNP will be encouraged through the PDP process to provide a teaching or related demonstration early in their first year.
- 3.C.4. Refine department policy to include expectations of teaching effectiveness and its inclusion in tenure and promotion decisions, PDP and PDR statements, and course assignment decisions, and student help assignments.
- 3.C.5. Establish the expectation of the development and continual refinement of a teaching philosophy statement as part of the PDP.
- 3.C.6. Align relevant investment decisions with a programs alignment with efforts to continually improve teaching effectiveness.

Objective 3.D: Implement equity-focused practices

- 3.D.1. Require all faculty and staff engage in professional development around cultural competency.

General Metrics:

- Student teaching satisfaction (GSS)
- Participation in teaching effectiveness support programs

Imperative 4: Deepen pride, belonging, and engagement by fostering a culture of excellence and inclusion to attract and retain a diverse body of students, faculty, and staff.

Strategic Objectives:

Objective 4.A: Increase opportunities for formal and informal faculty-student and student-student interactions

- 4.A.1. Host department or program-level inclusive get-togethers to (a) help faculty and students know each other in an informal atmosphere, (b) encourage students to interact and network among themselves, and (c) recognize student achievements in curricular, co-curricular, and leadership activities.
- 4.A.2. Recognize volunteering to work in tutor labs as part of Article 22 process by both departments and administration
- 4.A.3. Host college-level social event to promote Sense of Belonging and to celebrate achievements.
- 4.A.4. Create an “Alumni in Residence” program to interact with students and faculty.

Objective 4.B: Enhance student success and retention

- 4.B.1. Post, and commit to, office hours each term.
- 4.B.2. Conduct program-level focus groups to listen to current students and identify existing barriers to student success and retention. Prioritize issues facing underrepresented student groups.
- 4.B.3. Update and publish degree maps for all programs on official SCSU website.
- 4.B.4. Create college-wide approach to high-quality student advising.
- 4.B.5. Create a college-wide expectation for timely response to students.
- 4.B.6. Increase use of Navigate to proactively manage student success.
- 4.B.7. Utilize an entity external to SCSU to conduct the STEM Equity Program Evaluation Rubric for the college
- 4.B.8. Create program-level mentoring programs for students from underrepresented/underserved groups
- 4.B.9. Develop COSE advising training to prepare all faculty and staff to address student’s academic and non-academic questions.
- 4.B.10. Utilize the data from the ACCESS STEM research project to guide conducting, sharing and publicizing survey of student satisfaction with their sense of belonging and pride. Categorize results to demonstrate differences in opinion among different student groups.

Objective 4.C: Regularly showcase college accomplishments and points of pride

- 4.C.1. Actively feature at least 2 accomplished alumni, especially from underrepresented groups, on program/department web pages
- 4.C.2. Create faculty/staff awards and recognition in inclusiveness, collegiality, teaching, most improved teaching, research, and service awards to recognize outstanding service to the college
- 4.C.3. Create an approach for sharing program-level innovative and effective techniques

General Metrics (all metrics would be disaggregated by program and by demographic variables):

- Persistence and completion rates of COSE majors
- Advising Satisfaction Score (GSS)
- Major Satisfaction Score (GSS)
- Faculty and Staff Engagement Index (need to create)