

FYEE 2022 Workshop

Overview:

In this workshop, participants will learn how to build a holistic retention program that supports diverse first-year students in engineering. The model retention program is student-focused and developed with the student voice in mind. This workshop will present a working model of a current retention program, lessons learned from developing the program and future paths and opportunities for growth. Participants will also engage in interactive case studies to show the adaptability and flexibility of the retention program.

Program Components:

Summer Bridge Program: The 7-week Summer Scholars Bridge Program (SSBP) is a residential program prior to freshman enrollment. The SSBP objectives are to: 1) develop the academic and social skills necessary for achieving academic success; 2) acclimate students to the campus environment prior to their arrival as full-time students; 3) pair the students' math ability with the appropriate Fall semester Calculus course; and 4) develop a cadre of students mutually committed to each other's success. SSBP students enroll in 7-week versions of Calculus, Chemistry, Physics and English courses. All instructors use collaborative learning, in which students work in heterogeneous (in terms of ability level) teams, both in class and during organized study sessions. Students who pass the Summer Bridge English course receive advanced standing for English 1001. The SSBP ends with a Graduation Luncheon Ceremony for the Bridge students and their parents/guardians/siblings. Bridge instructors and college and university administrators are invited. Meritorious Bridge student scholastic performances are recognized in various categories

E-Portfolio: The students will be coached in using an E-Portfolio system to document their experiences. Each student will prepare and upload a reflective essay documenting their professional career aspirations and its relationship to the college education.

Collaborative Courses: These are intended to support learning in Calculus and Physics, the historic 'weed-out' courses for engineers and are attended by all selected Bridge students. The SCLC courses meet twice a week for 2 hours in addition to the regular Calculus or Physics course which is part of the curriculum. Students work in 4–6-member heterogeneous groups providing a comfortable environment to ask questions and learn. SCLC further strengthens the learning community built in the SSBP.

Monthly Socials: To strengthen the learning community, 3 to 4 monthly socials throughout each semester will allow students to interact with invited professionals and upperclassmen in an informal setting. Each monthly social will revolve around a theme and speaker(s), for example, reducing stress during midterms and finals, time management, setting high expectations, undergraduate research, international experiences, community engagement, *etc.*

Progress Reports: Progress reports help students monitor their academic performance throughout the semester. Each student is required to fill out 2 progress reports per semester for each course. A secondary goal of each progress report is for improved faculty-student interaction.

Community Engagement: Each student is required to perform 15 hours of volunteer K-12 approved outreach service and document the experience. For an experience to be approved

students must complete their hours with a program that has a focus on STEMM. Documentation is submitted in the E-portfolio.

Program Coaching: Students will arrange to meet the degree program academic advisor and an assigned project team member (program coaches) twice each semester (fall & spring). Prior to each meeting the student will submit instructor course progress reports for each course taken (2 reports/course/semester). At each meeting prescribed forms will be uploaded in the E-Portfolio.

Format:

This will be an interactive working session. Participants will work collaboratively through case studies. In addition to discussing the above techniques, participants will share best practices, collaborate with colleagues, and develop ideas they can implement at their institution.

Learning Outcomes:

Effective techniques to engage scholars in their success.

Intrusive advising strategies to improve early warning, intervention, and outcomes

Practical and effortless ways to use the tools at your campus for student development

Agenda:

Introduction (15 minutes)

- Icebreaker

Program Component Overview (20 minutes)

Case Studies/Examples (20 minutes)

- Early alert system
- Community Engagement
- Professional Connections
- Intrusive Advising

Current Retention Programming Inventory (15 minutes)

- What student support do you currently have on your campus?
- What student support do you currently have in your college?
- How involved are the students in the support programs?
- What is missing from student support?

Q&A (20 minutes)