Chapter 3.5: Freshman Undergraduate Retention

Objective

Improve retention and graduation rates for all first-year engineering undergraduate students, especially those from groups traditionally underserved by higher education and the engineering profession.

Goals

1. Conduct an undergraduate retention study that identifies populations most at risk of leaving,
2. Create an effective and sustainable retention program for the College of Engineering that brings together retention efforts taking place in all the departments,
3. Reduce retention gaps between under-served populations and majority populations in the college,
4. Raise average retention of first-year to second-year students to a rate of 69%, and
5. Increase graduation rate for transfer student.

Strategies

1. Develop a program that continuously improves the delivery of courses:
   • Create working group of faculty delivering first year engineering courses to share ideas, approaches for teaching first year students (faculty professional development)
   • Develop early feedback system for engineering students, combine university early feedback system with college courses
   • Finalize pass/fail efforts, either continue or adopt best practices form project for long-term implementation.

2. Increase collaboration among departments for advising first-year engineering students
   • Create a committee of all first-year advisers in COE that meets regularly and promotes college-wide professional development
   • Coordinate and strengthen retention activities with other campus units, e.g. Admissions Office, and Center for Advising and Student Achievement (CASA),

3. Create an annual retention reporting system that informs each undergraduate program about annual progress.
   • Evaluate and regularly assess the effectiveness of our retention efforts and activities
   • Maintain a separate retention committee (formally combined with recruitment activities)
   • Develop a standard method to collect information about why students depart the department/college

4. Improve the student experience in the College of Engineering

   Author: Tom Siller, Associate Dean for Academic and Student Affairs
• Provide information to students about all support services within the college and at the University level. Highlight this on the new college web site.
• Foster community among our transfer students through events and communications, and
• Encourage student involvement in student organizations and extra-curricular activities.

Metrics

• Freshman retention rates (by major, gender, race, ethnicity, residency, etc.),
• Six-year graduation rates (by major, gender, race, ethnicity, residency, etc.), and
• Data from senior surveys regarding the student experience in the College of Engineering
• Transfer graduation rates

Targets

• Freshman retention rate within College of Engineering: attain five year average of 69% (last 5 years: 67.12, last 10 years 67.95)
• Six-year graduation rate: attain 5-year average of 50% (current 5 and 10 year rates are 45%)
• Increase transfer student graduation rates within 10 terms: attain 5-year average of 51% (current 5-year average: 48%, 10 year average: 51%)