

IEC – Providing Instructional CPR Feedback Via Appreciative Inquiry

Objective

Review amended and submitted CPR reports for Engineering/Computer Science for comprehensiveness and goal alignment.

Resources

- This Worksheet
- Instructional Program CPR Checklist
- Completed Engineering/ Computer Science CPR

STEP ONE

Read and review excerpts from the Engineering/ Computer Science CPR draft below. Note your responses on the <u>Jamboard</u> to the following questions:

- What works well in the draft thus far?
- What questions does the information raise that you think the narrative should address?
- What are potential program goals in response to the information?

ACCESS

3.A. PROGRAM ENROLLMENT

What enrollment trends do you observe, and what may account for these trends?

We've seen a substantial and persistent increase in unduplicated enrollment in the program over the last five years from the 2016 to 2021 period. The 2021 enrollment figures close to doubling those of 2016, at an overall 77% increase. We believe the increase is due to the enhanced number of courses offered at the college as the program has grown from its inception in 2016, along with recruitment and engagement activities around the Engineering and Technology Scholars (ETS) learning community.





3.B. EQUITABLE ACCESS

Provide an analysis of how students, particularly historically disadvantaged students, are able to access the program.

i. PROGRAM ACCESS: How do your program enrollment demographics compare to that of the College as a whole and/or Division? What differences, if any, are revealed? What program, institutional, and/or external factors may have impacted equitable access, whether positively or adversely?

Figures 3b-1 and 3b-2 below show program demographics. The program enrolls students from a variety of ethnic backgrounds relatively consistent with the overall college population with 34.4% Asian, 1.6% African American, 19.3% Filipino, 19% Hispanic, 14.8% Caucasian, 6.7% Multiracial, 3.9% unreported, and less than 1% Pacific Islander.



Hispanic student enrollment at 19% may be a little low as compared to the college average of 29.8%.



Figure 3b-2 below shows overall enrollment disaggregated by gender in the Engineering/Comp program. Female student enrollment in the program is low (18.6%) as compared to the college average (53.5%).



iii. What efforts, if any, have been made to increase equitable access to your program? If more is needed, consider making it one of your program goals in the Action Plan.

The department has led or contributed to efforts within the community to enhance equitable program access, including hosting STEM exploration events for middle- and high-school students, concurrent- and dual-enrollment programming, and the development of STEM learning communities and recruitment efforts. FT faculty in the department have also led the development and implementation of several grant-funded projects that are designed to, among other goals, increase access and success for our STEM students generally, with specific functions supporting Engineering, Computer Science, and most recently Electronics Technology students.

STEP TWO

Read the Spring 2023 Engineering/ Computer Science CPR, pp. 6-11.

- Which questions were answered?
- Which would you advise to further explore, if any, and why?



STEP THREE

Which program goals seem like a natural outgrowth to the observations about access to the program? How so? See pp. 17-19 in <u>the CPR</u> for more details.

- □ **Goal 1:** Increase recruitment and retention of underrepresented minority students, including Hispanic, African American, and female students.
- Goal 2: Strengthen internship and partnerships through expansion of Fab Lab & Electronics Lab facilities and services...The impact for students is increased opportunity for hands-on and applications learning, increased engagement/retention, greater connection to internship and entry-level job opportunities, and professional development beyond the standard curriculum.
- □ **Goal 3:** Strengthen existing engineering and computer science curriculum by integrating course content that connects more to students' lived experiences through modules on technology's influence on societal and environmental issues, and the opportunity to contribute to solving the world's challenges.