2021-2022 Program Review

CAN Program Review (Instructional) - Engineering (Fall 2021)

STEP 1: Program Review Narratives

2021-2022

Instructional Program Review (IPR)

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Writing Team: n/A

Program Context

1. Mission: Cañada College's Engineering program is a transfer program that offers the lower-division courses needed by students to transfer to four-year programs in any field of engineering. The mission of the program is to educate students from a diverse population to become productive members of the engineering professions and society at large. The department combines excellence in teaching theoretical principles and concepts with practical hands-on experience and the development of technical proficiency and communications skills. The departments work closely with the College's Mathematics, Physics, Computer Science, and Chemistry departments, as well as the College's Student Services Division and four-year engineering programs to maximize students' opportunity for timely completion of courses and successful transfer. Although primarily transfer programs, courses are also available for students who are seeking to update job skills related to engineering. Engineering students receive academic support services and professional development opportunities from the College's STEM Center (including the Mathematics, Engineering, and Science Achievement (MESA) Program).

2. Articulation: no known changes

3. Community & Labor Needs: The demand for engineering courses has been affected by the recent expansion of Skyline College's Engineering Program. We are continuing to work with both Skyline and CSM on course offerings in order to best serve our students while ensuring healthy enrollments in engineering courses in the three colleges. For few years prior to 2019-2020 AY, there was significant flux with the engineering instructor position, that has since been addressed. Bay area laser and optics companies approached the program to help address their long standing and chronic problem of a lack of technicians in photonics, optics and laser technology sector. First, a board of advisors was created to discuss this challenge. The board of advisors comprising of industry and national laboratory representatives outcome recommended the creation of a program in photonics and laser technology that could address this workforce need.

Looking Back

4. Curricular Changes: The introduction to engineering class (ENGR 100) is an excellent way for high school and entering college students with STEM and Non-STEM backgrounds to explore the field of engineering. Because of the minimal pre-requisites for this class, it can attract students who are still exploring their education and career plans and especially those that are chronically underrepresented in engineering. The program has increased the frequency of this class and it is now being offered every semester and during the summer.

The ENGR 100 class is also now offered as an on-line class for students who are unable to attend the in-person offerings.

The number of ENGR classes that can now be taken as on-line offerings has increased. This includes classes like ENGR 230 and ENGR 260, besides ENGR 100, ENGR 210 and ENGR 215.

The number of Zero Textbook Cost (ZTC), Open educational resources (OER) or low textbook cost classes will increase significantly starting in AY2021. ENGR 215 has traditionally used the paid licensed software MATLAB and will instead be taught using the free open source resource called OCTAVE, which utilizes the same programming language as MATLAB. ENRG 260 and ENGR 261 will be offered as ZTC classes moving forward. ENGR 100 will be offered as a low textbook cost class (i.e. $40 or less).

Some ENGR classes have seen a chronically small enrollment. In particular, these are engineering dynamics (ENGR 240) and surveying (ENGR 111). Therefore, these classes are not being offered on a regular basis. It should be noted that CSM has decided to add ENRG 240 as an offering on their campus starting in AY 2021. It will be important to track their enrollments in this this class so that ENG 240 may be reconsidered in the future.

5A. Progress Report - IPC Feedback: No IPC feedback was available.

5B. Progress Report - Prior Program Goals: For the last review there were five action plans identified.

1. Hire a full-time faculty member in engineering
Response: This action plan was successfully completed in Fall of 2019.

2. It was recommended to reintroduce online course offerings.
Response: This objective was successfully achieved as every ENGR class is now available on-line. Lab only classes (such as ENGR 261) were also offered on-line during the pandemic period and future plans will be to provide students flexibility to take lab classes either in-person or online.

3. It was recommended to develop a 3-year SLO assessment plan in coordination with division dean and adjunct faculty in department.
Response: While SLO assessment has been on-going, there was change in division leadership. Hiring of permanent dean was completed in 2020-2021. Instructors will work with dean to develop and implement this 3-year plan.

4. A request to update laboratory resources for engineering classes in order to fulfill the SLO's in several classes was made.
Response: ENGR program successfully obtained a STEM CORE grant to being a partial filling of necessary laboratory equipment for the various ENGR classes. In addition, increased equity and access or students along with cost-cutting measures are being implemented with a move to open source software for use in laboratory and computational engineering classes. Request for additional funding from the college/district is pending.

5. A request to build laboratory facilities for engineering classes as well as ancillary programs related to engineering such as the engineering club was made.
Response: Availability of safe laboratory space in order to increase access to students continues to be a challenge. There is continuing need for the ENGR club to find space to store their robotics and other engineering kits. Also, there is a growth in the ENGR offerings by creation of the Photonics and laser Technology Certificate which will again place demands on safe laboratory space for students.

6A. Impact of Resource Applications: Requests have been recently approved but impact could not be measured as resources have not been put in place yet.

6B. Impact of Staffing Changes: The engineering instructor position was in great flux prior to 2019. However, since fall 2019, the position has been staffed and the program is returning back to its stable state with indications of growth over the past year. This has also lead to increased on line offerings of engineering classes, increase in the regularity of some of the popular engineering classes, creation of a dual-enrollment program with Woodside High School, creation of a new certification program that is beginning in 2022, and creation of zero cost textbook and OER classes.

Current State of the Program

7A. Enrollment Trends: For the 5-year period from 2016-2017 through 2020-2021, college wide enrollments were down by ~20% while the engineering program enrollments were down by 42%. Assuming that the decline of 42% is partly due to the overall college decline of 20%, it leaves us with an additional 22% decline to consider and address.

It is likely that two significant factors may have impacted the overall engineering program enrollments between the periods of 2016 through 2019. One factor was the large disruption to the program with the loss of long standing instructor Dr. Amelito. This was further disrupted by the sudden resignation of the new engineering instructor hire. The other was the expansion of the Skyline engineering program around 2016. Since 2019, the engineering instructor position has been stabilized. The effect of this may be evident by the fact that engineering enrollments are starting to increase again in comparison to the overall college trend, which continued to decline. Specifically, the ENGR enrollment increased by about 22% from 142 in 2019-2020 to 174 in 2020-2021. In comparison, over the same period, the college wide enrollment continued to decline, going from 28465 to 270448 or a decline of about 5%.

The annual headcount for the college was also on a declining trajectory between 2017 through 2020 but saw a slight uptick of about 5% in 2021 (from 10314 to 10775). During the same period, while engineering headcount also saw a similar declining trend, it demonstrated a significant uptick of nearly 44% in going from 2019-20 through 2020-21 (from 97 to 140). This may reinforce the enrollment data and support the theory that stability in the program is aiding in some recovery of the enrollment losses.

The FTEF had a consistent drop during the period from 2016-2017, when it was 2.76 through 2018-2019 when It reached 1.87. However, since then the trend seems to have reversed, with the FTEF currently at 2.65 for the 2020-2021 period. This is most likely due to the stabilization of the program through consistent course offerings following hiring of instructor in fall 2019.

The FTES value for 2020-21 is currently not available. However, in the period from 2016 through 2019, the FTES dropped by ~45% and this correlated with the drop in engineering student enrollment by approximately the same margin.

The LOAD for the program is currently is at 242, and is significantly lower that its value in 2015-2016 (when it was 400).

Since Cañada college is classified as an HSI and AANPI institution. It is important to look at the engineering program enrollment through this lens.
Over the period 2015-16 through 2020-21, the average headcount for the various race/ethnicities from PRIE are: Hispanics is 44.5%, white = 28.8%, Asian = 27.5%, Filipino = 11%,multiraces = 7.2% and Black/AA = 0.8%. No information was available for the Pacific Islander category.
In comparison, the college-wide average for these ethnicities in 2021 were: Hispanics: 38.2%, White = 23.6%, Asian = 15.9%, Filipino = 6.9%, Multiraces = 6.2%, and Black/AA = 2.6%.

Overall, while the program is doing better then the college with Hispanics enrollment (44.5% vs 38.2%) it is doing very poorly with enrollment of Black/AA students (0.8% versus 2.6%).

7B. Significant Changes in Your Program: One of the significant ongoing trends in the program has been the increasing number of sections which have enrollment of less than 20. The college goal is stated to be 25%. However, engineering appears to have consistently been above this number since the 2015-2016 period, except for the 2016-2017 period when it was 25%. Currently, the number stands at 80% (2019-2020). This is likely an indicator of the large choice available to students in selecting where (i.e. Canada, CSM or skyline) they can take their classes based on timing and scheduling. One must also consider the fact that engineering program is primarily focused on transfer of students. Since engineering majors are extremely diverse, students have many different requirements transfer resulting in a non-cohort like behavior for engineering classes.

The cancellation rate of sections has also been on an increasing trajectory since the 2016-2017 period. It is currently at a rate of 23% (for the 2019-2020 year). This is at least two times higher than the college wide rate of ~10%. The reason for this could be the overlap of engineering class offerings across the three colleges. For example, students have the choice of taking any given engineering class at any one of the three district colleges in any given semester. This trend might be accelerated by increase in on line offerings.

7C. Planning for Your Program: It is possible that the single biggest factor to consider moving forward is the flexibility a student has in the ability to take any given engineering class across any one of the three district. Informal data collected from students in the college engineering classes show that a large number of students taking ENGR classes are doing so across the three different colleges. This is likely based on convenience related to course semester/time/day and delivery method.
As a specific example of how this effects term to term enrollment, the Spring 2021 enrollment in ENGR 100 at Cañada College was 35 (higher the same term the previous year of 14). This was directly attributed to the fact that ENGR 100 was not offered in Spring 2021 at either of the other two colleges.

Some possible strategies to address the trends in enrollment and section cancellations are outlined below.
1.   Students identifying as Cañada College students tend to take several of their engineering classes in the sister colleges (and students from the other colleges do take classes on our campus). It will be important to collect data on this "Cafeteria" approach to taking classes across different campuses to see if it can lead to more consistent enrollment numbers.
2.   Students transferring to UC's and CSU's have a widely varying range of engineering class requirements due to the significant diversity of engineering major program needs. For example, computer engineering majors need vastly different set of classes than electrical engineering majors. In addition, some UC's do not require engineering transfers to take any engineering classes at the community college. One take away is that the minimum class size requirement to offer a class should be addressed on a case-by-case basis for the engineering program so that this diversity in choice continues to be preserved for students, especially in the advanced classes.
3.   As per information provided by counselors, students tend to maximize General education transfer requirements instead of taking engineering classes. This is a function both of the degree transfer needs as well as the heavy pre-requisite requirements on the highly specialized engineering classes. While the guided pathways approach may overcome some of these

limitations, a coordinated effort that involves the program, division, counseling, dual enrollment and our sister colleges may be required

4.   Increase engineering access to high-schools and undecided majors. The creation of a dual-enrollment class for high school students as well as continuing to offer the ENGR 100 class (introduction to engineering) with waivable pre-requisites and multiple modalities (online and in-person) could increase the contact between undecided majors and engineering as a field. This could translate into a strong pipeline of local students entering the program

5.   Increased equity and access to engineering classes. The program is aggressively increase access and equity by moving to classes that are based on one or more of the zero cost textbook, open educational resource or low textbook cost classes. In addition, the eventual goal will be to offer every engineering class through in-person as well as on-line modalities (including the lab heavy classes)

6.   Increase profile of the program through marketing. Program is working with the division and the marketing department to enhance program presence on social media, which could also help with enrollments.

7.   Provide attractive classroom and laboratory facilities to students. Several students have commented that it is much more enjoyable and fun to be in building 23 as compared to the traditional engineering classrooms of building 16. This would be apparent to anyone visiting the classrooms in these two buildings.

8A. Access & Completion: College-wide course success has generally been between 71 to 73% over the past five years. In contrast, success rates for the engineering program courses have been consistently higher than the college average. In 2019-2020 the success rate reached an all time high of 94% (in contrast to the college value of 71%). However, the pandemic year has seen a significant drop in success rate to 76% (although still higher that the college wide value of 73%). However, at this juncture, the pandemic data point (2020-2021) should not be considered as a trend and one or two additional cycles will be needed to determine if the success rate is actually declining.

The average course success rates aggregated by gender for the period between 2016 through 2021 suggests that Female have an 86% success rate versus Males, who have an 84% success rate. While the different is small, it is consistently seen in the year to year data. When success rates are segregated on the basis of race, multiraces and Black/AA identified students have consistently lower success rates at 77% and 79% respectively. Given the HSI designation of our institution, the success rates for Hispanic/Latinx identified students is 80%, lower than the program-wide average of 84%.

College-wide course retention rates averaged 85% over the past 5 years. In contrast the course retention in engineering averaged 90%. Course retention by gender did not show a significant difference between Female (89%) and Male (90%). Course retention by race had a similar trend to the course success rates, with multiracial and Black/AA having lower retention rates at about 82 to 84% and Hispanic/latinx at 88%, slightly lower than the program average.

Looking at success rates in the specific classes offered by the program for 2020-21, some useful indicators can be ascertained. While the total success rates are generally high across most of the classes (80 to 100%), ENGR 215 has the lowest success rate at about 70%. The reason for this could be access and equity issues due to use of proprietary paid licensing software (MATLAB). Starting in Spring of 2022, this class will be taught as a zero textbook class using OER education resources. This should address the equity and access issues.

It is useful to consider course level outcomes data in some of the important engineering course, such as ENGR 100, which is an introductory course that has minimal pre-requisites and is therefore also accessible to undecided majors.
Over the period 2017 through Fall 2021 the retention rate in this class has ranged between 88 to 100%. This is slightly higher than the college-wide average of around 84%. The average success rate in this class (of ~75%) compares well to the college wide average in other introductory (100 course number) classes of ~72%.

8B. Student Equity: Nationwide, engineering as an educational and professional field continues to suffer from a significant gender gap. This behavior is also evident in the engineering program at Cañada.
The number of students self-identifying as female continues to be a small fraction of the enrolled students in engineering at ~19%. While this number has been consistent since 2016, there has been a drop in 2020-21 to 13%. A continuing marketing, outreach, mentoring, and support program needs to be in place to attract and retain female students into the program.

Research has suggested that when students interact with successful professionals who have similar gender, race and ethnic backgrounds, there is an increased likelihood of motivation to pursue similar careers. Instructor is PI on NSF TRABAJO grant through which students in STEM disciplines are provided opportunities for career exploration. Efforts are being made to have engineers from under represented groups to participate in this. For example, job shadow provided by Talas, a biomedical engineering company, included three female engineers.

As noted in section 7B (enrollment trends) the program has a higher average enrollment percentage of Hispanic/Latinx students (44.5%) as compared to the college average of 38.2% over the past five years. Given that HIS classification of the institute, it is illustrative to look at PRIE Course Outcomes Data by Demographic Variables to assess the engineering program's ability to provide successful outcomes for Hispanic/Latinx. For the period of 2016-17 through 2019-20, the program's success rate for Hispanic/Latinx ranged between ~80-86%. In contrast the college-wide success rates for this group was significantly lower, ranging between 66-69% over the same time period.

Similarly, analysis of success rates for the AANIPI population college wide was 87-88% while their success in engineering ranged between 90-100%.

Since the department also serves students who have financially challenges, different efforts are being made to help these students succeed in their educational goals.

The program is hiring a work study student whose eligibility is based on financial needs. As the student earns money, they will gain valuable experience to strengthen their profile for college applications through hands-on in engineering laboratory work, technical writing, and visual presentations. The work study will help improve equity by providing opportunities to students traditionally underrepresented, such as due to financial hardships.

In efforts to further improve equity as well as access to engineering education, the program is also expanding the number of zero textbook cost classes that could help retain students who face severe financial challenges in their education pathway.

Instructor is also involved as PI on the NSF TRABAJO grant through which students with STEM educational and career interests are encouraged to participate in various career exploration activities, such as Job Shadows, Mentoring, Internships and Site Visits. Students are paid to attend Job Shadow activities through which they get to discuss a typical engineers work day and learn about the role of engineering education in their professional workplace. Research has suggested that providing students career exploration opportunities early and often is likely to increase their retention in STEM fields.

Engineering program will be working with SF State University to select Cañada College students to participate in paid research internships in engineering fields at SFSU. This program is funded by NSF and is being lead by the Engineering department at SFSU (Prof. Wenshen Pong) and Skyline college (Prof. Nick Langhoff). Through this program, up to 10 Canada college students will be able to perform engineering research through paid summer internships at SF State. Such opportunities help students realize that they can earn while learning in a professional environment that progresses their educational and lifelong goals.

8C. Completion - Success Online: The success rate reached an all time high of 94% in 2019-2020 (since the 2016-2017 period) but dropped to 79% in 2020-21. This correlated with the increased withdrawal rates seen that year (2020-21). This may be attributed to the severe disruption in access and change in teaching modalities due to the pandemic imposed constraints. A similar decrease in success in face to face learning was observed form 2019-2020 through 2020-2021, dropping from 94% to 76%. This singular data point should be revisited after data from another year or two is included to determine if this is a real trend or a singular data due to the pandemic.

The success rate in online classes for the 2020-2021 period was higher (83%) as compared to the face-to-face modality. This was likely due to the pandemic. No data was available for the success rate in online modality for the period between 2018-2020. Prior to that, for the periods from 2016-2018, the online success rates were consistently lower that the face-to-face model. At this juncture, the single data point (2020-2021) should not be considered as a trend and one or two additional cycles will be needed to determine if the improvement in online offerings will lead to better success rates with that modality.

9A. SLO Assessment - Compliance: All active courses have assessment methods and results entered into TracDat. The previous full-time faculty had not developed a three-year plan for SLO assessment before they left the college, so this will be developed in coordination with the dean.
9B. SLO Assessment - Impact: No dialogue regarding SLO assessment has taken place since Fall of 2019.
10. PLO Assessment: Six Program Learning Outcomes have been identified for the program on the department website. It is not clear how their assessment has been entered into TracDat; according to the previous program review, direct assessments have been performed for all PLOs for the program, but these results are not visible to the current writing team. The division dean will work with the college's technology and assessment team to find a record of these assessments, and ensure that PLO assessment continues and informs the trajectory of the department.
Program Review Narrative Status: Complete

Goal Description: Increase pool of adjunct instructors

A dual-enrolled Introduction to engineering class will be offered at woodside high-school beginning in Spring 2022. Due to the nature of the high-school scheduling, the need for a larger pool of adjunct instructors will ensure that all the campus classes can continue to be offered.

Goal Status: 1 - New (PR)
Relevant Program Review Cycle: 2024-2025
Estimated Start Date: 08/31/2022
Estimated Completion Date: 08/31/2023
Who's Responsible for this Goal?: Division Dean
Please select the college goals with which your program goal aligns.: Student Completion/Success - Provide educational and student services programs that highlight inclusivity, diversity, and equity in their mission to help students meet their unique educational goals and minimize logistical and financial barriers to success.
Please select the college strategic initiatives with which your program goal aligns.: K-12 & Adult School Partnerships

Action Plans

2018-2019 - Complete process for obtaining approval for a new full-time faculty hire in engineering, to begin in the Fall 2019 semester. (Active)
Who's Responsible for Completing this Action Plan?: Adam Windham **Estimated Completion Date:** 05/31/2019

Goal Description: Continue to expand online course offerings

Identify courses that would satisfy student demand if offered in an online environment, and faculty highly-qualified to teach them, to recapture a student population lost to reduction in online course offerings.

Goal Status: 2 - Continuing (PR)
Relevant Program Review Cycle: 2023-2024
Estimated Start Date: 08/31/2021
Estimated Completion Date: 08/31/2023
Who's Responsible for this Goal?: Engineering Instructor
Please select the college goals with which your program goal aligns.: Organizational Development - Focus institutional resources on the structures, processes, and practices that invest in a diverse student population and prioritize and promote equitable, inclusive, and transformative learning.
Please select the college strategic initiatives with which your program goal aligns.: Improve Student Completion

Action Plans

2018-2019 - Review prior online course offerings and enrollment patterns, to determine which courses are most eligible for online delivery. Consult with sister colleges to ensure complementary course offerings that will reduce competing overlap. Consult with faculty to identify qualified instructors for those courses, and then begin scheduling them no later than the Fall 2019 semester. (Active)
Who's Responsible for Completing this Action Plan?: Adam Windham **Estimated Completion Date:** 03/31/2019

Goal Description: Develop a three-year SLO assessment plan

Develop a three-year SLO assessment plan, in coordination with division dean and adjunct faculty in the department.

Goal Status: 1 - New (PR)
Relevant Program Review Cycle: 2024-2025

CAN Program Review (Instructional) - Engineering (Fall 2021)

Estimated Start Date: 08/31/2021
Estimated Completion Date: 08/31/2024
Who's Responsible for this Goal?: Division Dean and Engineering Instructor
Please select the college goals with which your program goal aligns.: Student Completion/Success - Provide educational and student services programs that highlight inclusivity, diversity, and equity in their mission to help students meet their unique educational goals and minimize logistical and financial barriers to success., Community Connections - Build and strengthen collaborative relationships and partnerships that support the needs of, reflect, and enrich our diverse and vibrant local community., Organizational Development - Focus institutional resources on the structures, processes, and practices that invest in a diverse student population and prioritize and promote equitable, inclusive, and transformative learning.
Please select the college strategic initiatives with which your program goal aligns.: Improve Student Completion, Implement Guided Pathways

Action Plans

2018-2019 - Develop a three-year SLO assessment plan, based on course offering patterns. (Active)
Who's Responsible for Completing this Action Plan?: Adam Windham **Estimated Completion Date:** 12/14/2018

Goal Description: To update laboratory resources for engineering classes

The objective here is to build on the hiring of a full-time engineering instructor by implementing a longer-term vision for engineering based on strengthening student learning outcomes and increasing student access and success. SLOs in several engineering classes require hands-on experimental activity, including performing experiments, making measurements and analyzing data. In this resource request, the instructor plans to upgrade the hands-on offering to students by providing modern and state-of-art laboratory equipment.

Goal Status: 2 - Continuing (PR)
Relevant Program Review Cycle: 2023-2024
Estimated Start Date: 06/15/2020
Estimated Completion Date: 08/31/2022
Who's Responsible for this Goal?: Engineering Instructor
Please select the college goals with which your program goal aligns.: Student Completion/Success - Provide educational and student services programs that highlight inclusivity, diversity, and equity in their mission to help students meet their unique educational goals and minimize logistical and financial barriers to success., Organizational Development - Focus institutional resources on the structures, processes, and practices that invest in a diverse student population and prioritize and promote equitable, inclusive, and transformative learning.
Please select the college strategic initiatives with which your program goal aligns.: Improve Student Completion, Enhance Marketing

Action Plans

2020-2021 - To acquire necessary laboratory resources and integrate them into the various engineering classes. (Active)
Who's Responsible for Completing this Action Plan?: Engineering Professor **Estimated Completion Date:** 08/30/2020 **Related Documents & Links:** LabResources-ENGR-2021.xlsx

Resource Requests

Laboratory Supplies - Many conventional hands-on activities for the introduction to engineering class are currently not in place. This makes it very difficult to achieve student learning objectives related to hands-on learning, such as performing experiments,

making measurements and analyzing data. This resource request will put in place sufficient resources to provide every student in the Intro to ENGR class an opportunity to participate a several different hands-on activities.

Status: New Request - Active
Type of Resource: Equipment (Items Over $5000)
Cost: 11785
One-Time or Recurring Cost?: One-Time Cost
Critical Question: How does this resource request support closing the equity gap?: Access to such resources will ensure that student who have not had prior access or experience with working with laboratory resources, for instance, due to differences in high school resources available, will now be able attain equity in essential engineering and STEM hands-on laboratory work.
Critical Question: How does this resource request support Latinx and AANAPISI students?: ENGR classes have significant fraction of students coming from the Latinx and AANAPISI communities and access to requested resource lead to equity in access to resources that ensure success in engineering classes.
Resource Priority Ranking: High Priority

Goal Description: To build laboratory facilities for engineering classes as well as ancillary programs related to engineering such as the engineering club

The objective here is to build on the hiring of a full-time engineering instructor by implementing a longer-term vision for engineering based on strengthening student learning outcomes and increasing campus-wide student access and success. SLOs in several engineering classes require hands-on experimental activity, including performing experiments, making measurements and analyzing data. Many students, (including non-engineering majors) across the Cañada campus also desire access to engineering resources, such as additive manufacturing and 3D printing (example through the engineering club). In this resource request, the instructor plans to upgrade the hands-on offering to students by providing modern and state-of-art laboratory equipment and also obtain the necessary space to be able to provide students a safe and functional location to be able to access activities like 3D printing.

Goal Status: 1 - New (PR)
Relevant Program Review Cycle: 2023-2024
Estimated Start Date: 08/31/2021
Estimated Completion Date: 08/31/2023
Who's Responsible for this Goal?: Engineering Instructor
Please select the college goals with which your program goal aligns.: Student Completion/Success - Provide educational and student services programs that highlight inclusivity, diversity, and equity in their mission to help students meet their unique educational goals and minimize logistical and financial barriers to success., Community Connections - Build and strengthen collaborative relationships and partnerships that support the needs of, reflect, and enrich our diverse and vibrant local community., Organizational Development - Focus institutional resources on the structures, processes, and practices that invest in a diverse student population and prioritize and promote equitable, inclusive, and transformative learning.
Please select the college strategic initiatives with which your program goal aligns.: Improve Student Completion

Action Plans

2020-2021 - To work with facilities to identify location and necessary infrastructure so as to improve access to safe and accessible laboratory space and infrastructore (Active)

Who's Responsible for Completing this Action Plan?: Engineering Professor working with facilities
Estimated Completion Date: 08/31/2020
Related Documents & Links:
FacilitiesRequests-ENGR-2021.xlsx

Resource Requests

Facilities requests, including, fume hood and eye wash station - In order to provide safe usable laboratory space to perform engineering experiments

Status: Continued Request - Active

Type of Resource: Facilities

Cost: 25000

One-Time or Recurring Cost?: One-Time Cost

Critical Question: How does this resource request support closing the equity gap?:

Critical Question: How does this resource request support Latinx and AANAPISI students?:

Resource Priority Ranking: