

Cabrillo College Engineering Department NSF-Funded SPECS Scholarship Program

The objective of the SPECS (Scholars Program for Engineering College Students) Scholarship Program is to support academically talented, financially disadvantaged students who are from groups that are traditionally underrepresented in engineering professions: minorities, women, and first-generation college students. The goals of the SPECS program are to increase retention, success, and transfer rates among those selected so that they successfully transfer to a four-year university to complete their BS degree in engineering.

1. Student Selection Criteria:

The selection criteria for the program are as follows:

- Majoring in engineering at Cabrillo College
- Beginning at or continuing at Cabrillo during the 2017-18 Academic Year.
- Planning to take Math 4 or a higher level in Fall 2017
- Full-time student (12 + units) for Fall 2017
- Citizen of the United States, nationals of the United States, aliens admitted as refugees under section 207 of the Immigration and Nationality Act, or aliens lawfully admitted to the United States for permanent residence.
- Grade Point Average of 3.0 or above in math, science, and engineering courses and in overall transfer coursework. For incoming high school students, the minimum GPA is approximately 3.5 in math and science courses taken in high school.
- Demonstrate financial need as defined for undergraduate students by the US Department of Education rules for need-based FAFSA.

2. Application Process:

The SPECS on-line application is now posted on the Cabrillo College Engineering Dept. homepage. Submissions are due May 31, 2017 at 5:00 p.m. The following needs to be turned in with the online application:

- 300-word personal statement describing your academic and career goals
- letter of recommendation from a high school or college teacher/professor
- Cabrillo College transcript (can be an unofficial transcript or a print out from WebAdvisor) (required if you have attended Cabrillo)
- High school transcript(s) (required if you graduated high school in June 2017)
- Other college/university transcripts (required if you attended another college/university)

3. Scholarship Awards:

Students will receive a scholarship award of **\$3,350 each semester during their three years of engineering study at Cabrillo College** as long as they show successful academic progress as defined by:

- Continuing to pursue an engineering major
- Following approved educational plan
- Full-time student (12 + units) for Fall 2017
- Successfully completing the year's core* courses with an average grade of a B or better
- Attaining a GPA of 3.0 or higher in transfer level coursework
- Participating in at least five academic and/or enrichment activities per semester [engineering clubs; mentoring; family night; tours; and tutoring and academic services offered through the STEM Center (MESA and Access.)]

* Core courses are defined as required major courses as shown on assist.org (or other page documenting required transferable courses for an engineering major).

4. S-STEM Student Support Services and Programs:

The SPECS program will utilize programs that will address the three major aspects of the student's community college experience: Financial need, academic preparation, and academic and professional identity.

4.1 Financial Assistance:

- The SPECS Financial Advisor will ensure that the Federal Financial Aid Free Application for Federal Student Aid (FAFSA) form and all necessary documentation have been submitted and approved, so that the students can receive the appropriate financial aid.

4.2 Academic Preparation:

- SPECS scholars will meet with the SPECS Academic Counselor to declare their engineering major and design an educational plan based on their major and transfer institution.
- SPECS scholars will be meet with the SPECS academic counselor during the fifth and tenth week of the semester to check-in on their academic progress. Students will bring to the appointment a completed Cabrillo Course Progress Early Intervention Form where instructors document academic progress. If students are having trouble succeeding, the counselor will suggest that the students get assessed by the Learning Skills Program and participate in the physics, chemistry, engineering and computer science academic services through MESA, PLC and Access.
- The SPECS program will connect the SPECS students with academic support in math depending on level. Students who are enrolled in precalculus will be identified for PREP; and students at math levels above precalculus will be supported through the STEM Center peer tutoring and MESA academic excellence workshops.

4.3 Professional Identity:

- SPECS scholars will have their photos taken and write a short biography that will be placed in the Engineering announcement board and web site.
- SPECS students will be expected to take Engr 5 (Engineering as a Profession) if they have not already done so. Engr 5 exposes the scholars to the exciting world of engineering through hands-on design projects; tours of engineering facilities; interacting with engineers, and team projects. In addition, students learn the necessary academic skills to be successful engineering students. ENGR 5 is offered during the summer, fall, and spring sessions.
- Introduce scholars to the STEM Center, a 5,000 sq ft study center where approximately half of the students are engineering majors. This is the main hub for studying, group work, workshops, event postings, and socializing.
- SPECS students will be encouraged to become a member of one the seven engineering student clubs on campus: Engineering Society, Engineering Abroad Club, Robotics Club, Engineering Outreach Club, Women in Science and Engineering, & Bike Co-op, and Sustainability Club.
- STEM/MESA End-of-Semester Celebration – SPECS students will be invited to the STEM End-of-Semester Celebration at the end of both the fall and spring semesters. MESA hosts this event for the students and their families/friends to celebrate the successful completion of each semester. In addition, the spring celebration also honors those students transferring and those recipients of scholarships. The celebration includes food, music and a semester photo gallery.
- MESA Leadership Retreat – Level 1 scholars (first year students) will be encouraged to attend the MESA Leadership Retreat, where they will have the opportunity to build bonds with each other, as well as with other enthusiastic engineering students from over 15 community colleges across the state.
- Engineering Orientation and Expo – SPECS students will be invited to the Engineering Orientation and Expo. The purpose of this event is to have students' families and friends become a part of the Cabrillo Engineering community and to educate the families on the importance of an Engineering education. All attendees are invited to partake in small group presentations led by local Cabrillo Engineering alumni professionals, discussing the value of their educational and professional backgrounds within the fields of Engineering. In addition, the SPECS Financial Advisor will give a presentation for families to understand the financial aid process. The goal of the Engineering Orientation and Expo is to encourage family support for both first time and continuing Cabrillo students who are pursuing an education and career in Engineering. SPECS scholars will also have a chance to present their semester projects as well as disseminate any new information gained during the program.
- The STEM Center will host enrichment events such as the STEM Friday Colloquium, which covers topics on internships, research, resume building, and other general engineering topics of interest.

- SPECS student will have the opportunity to form student chapters of professional engineering organizations such as Society for Hispanic Professional Engineers (SHPE) and Society of Women Engineering (SWE).
- Connect the scholars to a support network comprised of the following: Upper-class students, faculty, alumni, and/or local engineers. The Engineering Department has a database of more than 1,000 Cabrillo engineering alums.
- Each SPECS student will choose one mentor from the following: One of the engineering faculty members; an upper-class engineering student; and/or a local practicing engineer who are in the same engineering discipline.
- “Movies and Parents” (“Novelas y Mamas y Papas”) – Research shows that students who have parents who understand the challenges of college are more likely to be supported by their families.
- “Peers and Pizza” Study Night – Open the engineering lab for a late evening gathering where students are encouraged to study and share how they are utilizing institutional resources.
- Collaborate with local engineering companies, municipalities, and engineering organizations such as California Professional Engineers, American Public Works Association (APWA)-Monterey Bay Chapter, American Council of Engineering Companies-California, and Monterey Bay Area Chapter (ACEC-CA) in establishing an internship program for the SPECS scholars.