The objective of the SPECS ( Scholars Program for Engineering College Students) Scholarship Program is to support academically talented, financially disadvantaged students 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 satisfaction among the scholars so that they transfer to a four-year university to complete their BS degree in engineering.

1. Student Selection Criteria:

The criteria of the students participating in the program are as follows:
- Majoring in engineering
- Continuing at Cabrillo during the 2015-16 Academic Year.
- Citizen of the United States, nationals of the United States, aliens admitted as refugees under section 207 of the Immigration and Nationally Act, or aliens lawfully admitted to the United States for permanent residence.
- Completion of Math 152 Intermediate Algebra, prerequisite for Precalculus.
- Grade Point Average of approximately 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 posted on https://docs.google.com/a/cabrillo.edu/forms/d/1EbKiI3-8pNTLbpmTy8TB6qF0UJBCJWNVj1wfsOrt02w/viewform. Submit by Tuesday, April 7, 2015. In addition, the following needs to be turned in to Windy Valdez (wivaldez@cabrillo.edu) by Tuesday, April 7, 2015.
- Transcript showing course completion (can be an unofficial transcript or a print out from WebAdvisor).
- 300-word statement describing academic and career goals.
- An up-to-date Education Plan approved by a counselor (preferably a STEM counselor) indicating all completed, in-progress, and future courses needed to transfer showing full-time coursework during the Spring 2015 and the 2015-16 year (at least 12 units of required courses each semester of the award).
- A document from the Financial Aid Office specifying that you demonstrate financial need.

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 which is defined by:
- Following their educational plan
- Continuing their pursuit of an engineering major
- Successfully completing the year’s core* courses with an average grade of a B or better
- Attaining a core course GPA and an overall transfer coursework GPA of 3.0 or higher
- Participating in at least five academic and enrichment activities [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 transferable courses as shown on assist.org (or other page documented required transferable courses).
4. S-STEM Student Support Services and Programs:

The SPECS program will utilize programs which will address the three major aspects of the student’s community college experience: their financial needs, academic preparation, and academic and professional identity.

4.1 Financial Assistance:
- SPECS Financial Advisor to 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.
- MESA Director, PLC Coordinator and other tutoring centers on campus so that they can investigate opportunities for working as tutors and peer leaders for courses they have already successfully completed.
- Scholarship Coordinator in the Financial Aid Office to determine other sources of campus scholarships.
- Job Placement Office to learn about other on-campus job opportunities.

4.2 Academic Preparation:
- SPECS scholars will 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 on their academic progress. Students will bring to the appointment a completed Cabrillo Course Progress Early Intervention Form where the course instructors document the students’ 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 the academic support depending on their level of mathematics. 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.
- Currently, MESA provides academic excellence workshops (AEW) in math and physics courses only. AEW will be added in engineering and computer science courses which are vital to the success of engineering students.

8.3 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
- Expose the scholars to the exciting world of engineering through the ENGR 5 Engineering as a Profession course where students explore the many facets of engineering through hands-on design projects; tours of engineering facilities; interacting with engineers, and tours. In addition, the students learn the necessary academic skills to be successful engineering students. Once students complete this course, they have a better understanding of the field of engineering, industry, and job function they are most interested in. ENGR 5 is offered during the summer, fall and spring sessions.
- Introduce scholars to the STEM Center: the 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. Here, they will become part of the network of engineering students and faculty.
- 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.
- 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 another 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 will be encouraged to attend the MESA Leadership Retreat, where they will have the opportunity to build bonds with each other, as well as other enthusiastic engineering students from over 15 community colleges across the state, in a weekend retreat setting.
- 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 and 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; new knowledge that resonated with their academic and professional identity.

- The STEM Center will host enrichment events, STEM Friday Colloquium, which inspire students on professional topics such as guest engineer speaker topics, internships, research, and resume building.
- 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). This gives underrepresented groups the opportunity to network with successful individuals from identifiably similar ethnicity and gender groups. Research indicates that participation in internships and major related clubs and organizations both relate to an increase in commitment to professional engineering identity; and faculty support and mentoring relate to an increase in academic engineering identity.[2]
- Connect the scholars to mentors from any of the following: upper-class students, faculty, alum, and/or local engineers. The Engineering Department has a database of more than 1,000 Cabrillo engineering alums who scholars can be connected with in person or virtually.
- Each SPECS student will choose at least 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 Mothers” (“Novelas y Mamas”) – Research shows that students whose mothers have a higher level of education are also more likely to complete an engineering degree in five years. [6] Mothers and other family members from underrepresented families may not be equipped to provide information and exposure that will allow them to support their children in endeavors toward academic and professional success. Therefore, SPECS students and their mothers will be invited to an event they will view and discuss a selection of short films for Novelas Educativas®, a new innovative media developed for and targeted toward Latino families, social mobility and academic and professional success.
- “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.