

White Paper

Troops to Engineers SERVICE

(Success in Engineering for Recent Veterans through Internship and Career Experience)

I. Purpose

To create sustaining financial support for SDSU's highly successful Troops to Engineers SERVICE Program.

II. Introduction, background, and need

The need for skilled professionals to fill science and engineering positions in the U.S. is projected to increase over the next ten years at a time when fewer American born students are choosing to pursue careers in science and engineering. Veterans pursue engineering careers at twice the rate of their non-veteran counterparts. Veterans in undergraduate engineering programs are older than their non-military cohort, but they are more focused, have higher GPA's, graduate at a higher rate and have a wealth of practical as well as leadership experience that industry desires. The Post 9/11 GI Bill provides excellent support for student-veterans during the regular school year but they need good paying jobs over the summer and during break periods to complete their education and get their degrees. Competition for good, paid internships in engineering can be fierce.

San Diego is "ground zero" for veterans' successful transition to civilian careers. More active-duty personnel separate from the military in San Diego than any other city in the country and that trend is expected to continue over the next ten years. There are more veterans in California than any other state in the country. San Diego State University (SDSU) has a reputation as the most veteran friendly campus in California with: a larger veteran population than any other campus in the state, a Student Veterans Center on campus that provides comprehensive services to veterans, and a vibrant Student Veterans Organization (SVO) that supports the emotional and affiliation needs of student veterans. Public universities such as SDSU provide veterans and Active Duty Military students with the best dollar value for their tuition assistance and GI Bill benefits. Career-enhancing, paid internships are the key to a successful transition from military to civilian careers.

III. Solution and benefits

In January, 2011, SDSU launched a highly successful pilot program funded by the National Science Foundation (NSF) called Troops to Engineers SERVICE. The program presents a "win, win, win" solution to a local and national problem by creating a clear path from military service to a careers in engineering for veterans.

The program is a “win” for veterans because it facilitates their transition into paid internships that complement their academic training and augment their financial needs (an important factor for older students.) In addition, the program transitions many student-veterans into full time jobs in engineering upon graduation because internships have proven to be the best path to full time employment for graduates.

The program is a “win” for industry because it increases the pool of highly qualified candidates for the growing number of jobs in engineering. The program is a “win” for the country because it reinforces the United States’ position as the global leader in engineering and provides support for young veterans who have honorably served their country at a time when joblessness among young veterans is at an unprecedented high.

IV. Goals and evaluation of the program

Goal #1: To place 100% of SDSU student-veterans seeking career assistance into paid internships and full time jobs upon graduation.

Goal #2: Increase the number of veterans pursuing degrees and careers in engineering at SDSU.

Goal #3: Create a regional and national model for other universities of a program that will increase the number of veterans pursuing careers in engineering across the country.

V. Preliminary results

Preliminary results indicate that the program works. During Spring Semester 2011, the 14 student-veterans who requested assistance were placed in internships. **All of the 14 students placed in internships were asked by their employers to stay on in full time, or part time, jobs when the new school year started.**

This Fall, 58 students (to date) have enrolled in Troops to Engineers SERVICE (up from 29 this past Spring) indicating a growing demand among student-veterans for this program.

VI. Cost

The annual cost of the program is \$100,000. The cost covers the program director’s salary, the salary of a part-time student assistant, a small travel budget, creation of marketing materials and miscellaneous supplies. A long term goal of \$2.5M has been established as a named endowment to fund a permanent position by way of the endowments annual distribution in perpetuity. To provide support please go to: <https://newscenter.sdsu.edu/giving/Default.aspx?aogid=110>

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