

CONSIDERING COLLEGE? ADVICE FOR VETERANS

Many veterans turn their attention to higher education after their time in the military. The education and training received in the military can provide practical knowledge and skills that can be applied to a higher education degree or certificate. For instance, mechanical or electrical training can be a great springboard to an engineering or technical degree. Experience in management and logistics can lead to a business degree. Whatever path the student veteran chooses, the discipline and time management skills honed in the military are of tremendous value to future studies. Many universities recognize the assets that student veterans bring and are excited to have student veterans join their educational programs. Based on research about student veterans majoring in engineering, funded by the National Science Foundation (NSF), the goal of this report is to help student veterans plan for higher education.

Types of schools and programs

- » **Community or technical colleges:** These public institutions provide two programs for returning service members. Technical degree and certificate programs prepare students for trades (e.g., electrician, welder) and can lead to immediate employment upon completion. College transfer programs offer foundational math, science, social science and humanities courses suitable for transferring to a four-year institution. Community colleges can also help reintroduce math and writing skills not used since high school.
- » **Four-year institutions:** These institutions can be public or private and offer bachelor's degrees in a wide range of fields. Students may start in these institutions as first-year students or transfer there from a community college.

Whatever type of school is chosen, be sure that it is accredited by a regional accrediting organization and that the degrees and programs offer preparation for a future career. GI Bill benefits may not be used at unaccredited institutions.

"There is a lot of cross-over between having a precision-based mindset that's drilled into us in the military and having the same mindset in engineering. So, I feel like [military service] may make it easier to transition than a lot of people believe."

– Marine,
Textile Engineering

Time as a service member

- » If the command and job duties allow, take advantage of voluntary off-duty education programs.
- » When selecting courses for voluntary off-duty education programs, consider the ultimate educational goal:
 - » For those interested in a technical degree or certificate, consider courses that will count toward the desired degree.
 - » For four-year college bound students, consider courses that will easily transfer into most four-year degree programs such as English composition, social sciences, math, foreign language and humanities courses. Make sure the courses are designated for “college transfer.”
- » Seek advice from the base Education Services Officer (ESO). They can help guide service members in designing an educational plan.
- » Reach out to schools of particular interest before completion of service. Ask about what courses to take with voluntary off-duty education programs.

Transitioning out of the military

- » As much as a year before the planned separation date, create an education action plan:
 - » Explore career pathways and their educational requirements. Consider pursuing a career related to the tasks performed while in service, or something different.
 - » Consider living location.
 - » Consider whether to attend on a full-time or part-time basis.
 - » Consider the start date. Most not-for-profit colleges start classes for new students in the fall (August/September) and spring (January).
 - » Search websites and request information from schools about the desired educational program, career placement, services offered to student veterans, credit for any coursework or training completed, and application requirements and deadlines. Inquire whether the campus hosts an active Student Veterans of America (SVA) chapter.
 - » Seek advice from the base Education Services Officer (ESO).
- » Consider brushing up on math skills not used since high school through free resources like Khan Academy (www.khanacademy.org) to prepare for college-level math courses, particularly in the pursuit of an engineering or science degree.
- » Many students enter college with strong skills in programs like Microsoft Excel, Word and PowerPoint. Goodwill Community Foundation, Inc. (GCF) offers free online resources that can be helpful in learning these programs. Visit <https://edu.gcfglobal.org/en/excel2016/>
- » Some colleges and universities may give academic credit for courses taken through the military which appear on the Joint Services Transcript (JST).
- » Veterans with strengths in specific areas may want to register for College Level Examination Program (CLEP) exams which can provide course credit at many institutions in many common introductory courses, such as English composition, world languages, history, economics, etc. Active duty and student veterans may be eligible to take these exams at no cost. Visit <https://clep.collegeboard.org/earn-college-credit/military-benefits>
- » Private colleges and universities may be affordable through the Yellow Ribbon Program. Learn more about this at <https://www.military.com/education/gi-bill/the-yellow-ribbon-program-explained.html>



- » Reach out to selected schools for advice based on personal goals and educational history. Consider contacting the admissions office, the student veterans' organization (SVO) (e.g., the campus SVA chapter), departmental representatives from the intended major, and the School Certifying Official (SCO) who can help navigate the use of GI Bill benefits. Some schools have people dedicated to serving student veterans in the admissions office who can meet with prospective students before they apply. Many schools consider all veterans to be transfer students which enhances the chance of acceptance since military experience is more valuable than high school grades.
- » Fill out the Free Application for Federal Student Aid (FAFSA) that will determine eligibility for financial aid beyond what is provided by the GI Bill. For example, some veterans may be eligible for Federal Pell Grant funds or other assistance.

"I just thought of [my MOS] as my job. As a heavy equipment operator, I just worked with a bunch of engineers. I didn't really realize that I already did engineering things."
– Marine, Mechanical Engineering

Next steps

- » During the Transition Assistance Program (TAP), student veterans will learn about GI Bill benefits, which are earned through sacrifice and service. These benefits have real monetary value and should be spent wisely. These benefits are time limited — generally to 36 calendar months of full-time study (about eight to nine semesters). Therefore plan carefully how, when and where to spend these benefits. For example, it may be a wise decision to use other funding sources (e.g., Federal Pell Grant funds or state programs for veterans) to attend a less expensive community college before transferring to a four-year institution and accessing GI Bill benefits.
- » Understand the difference between not-for-profit and for-profit institutions. All public schools and most private schools are not-for-profit. Be sure that the school chosen has students and financial well-being as a top priority. The Department of Education (ED) provides a database of accredited institutions and programs that are eligible to receive federal funding at <https://ope.ed.gov/accreditation>. For student veterans interested in an engineering degree, check with the Accreditation Board for Engineering and Technology, Inc. (ABET) for accredited programs at <https://www.abet.org/accreditation/find-programs>.

- » If a student veteran has been out of school for a while, is not sure what they want to do, or needs to brush up on certain skills before transferring to a four-year school, consider beginning at a community college on the college transfer track. General education requirements as well as important prerequisite courses for the chosen major can be taken at a community college for a fraction of the cost of four-year institutions. Make sure that the courses taken will transfer to the desired program at a four-year institution.

About the project

The NSF-sponsored project “Military Veteran Students’ Pathways in Engineering Education” brings together an interdisciplinary research team from engineering, sociology, and education with expertise on veterans, gender, race/ethnicity, social capital, and persistence in higher education providing a strong foundation for advancing knowledge in engineering education. The project addresses gaps in the literature on student veterans in engineering by exploring their pathways and experiences across four institutions. During the four-year study, dozens of student veterans in engineering were interviewed individually and in focus groups to study the conditions under which student veterans pursue engineering education and the factors that support their success. The goal was to understand what made them successful as they transitioned from the military to pursuing a bachelor’s degree in engineering and understand how the military and universities can best support the success of student veterans. University administrators and veteran support personnel were also interviewed to learn about policies and practices that shape successful student veteran experiences. The results of this project can help student veterans thrive in college and specifically in engineering majors and inform strategies for faculty and administrators in serving student veterans.

The project team consists of:

- » Susan M. Lord, Integrated Engineering, University of San Diego
- » Catherine E. Brawner, Research Triangle Educational Consultants
- » Michelle M. Camacho, Sociology, University of San Diego
- » Joyce B. Main, Engineering Education, Purdue University
- » Catherine Mobley, Sociology, Clemson University



NC STATE UNIVERSITY



Supported by NSF “Military Veteran Students’ Pathways in Engineering Education”
Grants EEC-1428512 and 1428646

The recommendations expressed are those of the authors
and do not necessarily reflect the views of the National Science Foundation.

