



Earning a MSSE can boost your military and engineering career

For many officers and NCOs in the military, thinking beyond retirement occupies a major part of free time. The good news is the many educational and career opportunities in the professional military make pursuing an advanced degree while in-service a great option for most. A masters degree—especially for engineers—can open doors for career paths both before and after you retire the uniform.

[In an article for Military.com](#), Al Lee, director of quantitative analysis for PayScale.com said for certain occupations, a master's degree may be the only way to enter the field. A degree can also help in engineering, especially if you didn't major in that area as an undergraduate.

If you did earn a bachelor's in engineering, the news is even better. [According to Military Times](#), a master's in engineering has real benefits for earning potential: experienced college grads earn \$77,000 while graduate degree-holders earn \$98,000 (on average). The percentage of unemployed engineers with a graduate degree is half (2.3 percent) of their bachelor's-only counterparts.

For many engineers, a Masters of Science in Systems Engineering is the logical advanced degree. [Onlineengineeringdegrees.com defines systems engineers](#) as responsible for the development and maintenance of efficient systems and processes. Ultimately, a systems engineer eliminates inefficiencies in a specific process to benefit ROI, stakeholders and the process itself. In many institutions, systems engineering is considered an extension of the industrial engineering program, which is also concerned with the development and optimization of existing systems to help avoid inefficiencies and waste. The science generally encompasses all sub-disciplines of engineering.

While having a college degree isn't required to join the military as an NCO, today's professional military has a good percentage of enlisted personnel who have earned a bachelor's degree. Getting a master's is a great plan to jump-start a post-retirement civilian career, but it also can boost a military career mid-stream.

[Career Trend explains](#) that competition for some NCO positions can be fierce, especially in occupations like engineering, science and health care. If you are in one of these fields, having a master's degree in the field should help you earn promotions and acceptance to more advanced jobs in the field.

The same can be true for officers. [In the same article, Career Trend](#) found while an advanced degree isn't required for promotion, it is required to fill many specific officers' jobs. What's more, a 2006 Heritage Foundation study indicated that fewer than 20 percent of incoming Army officers have advanced degrees. At the same time, between 35 and 45 percent of Army officers hold advanced degrees—about the same percentage who hold the rank of major or better. Heritage concluded this is a clear indication that even though it may not be a formal requirement, a master's degree is critical to advancement in the modern U.S. Army.

Don't forget that career development isn't just about education. While you're serving in the military and earning experience in a high-tech job, you'll need more to successfully jump off into the civilian job market. [Military.com advises](#) that while you're earning a master's, make sure you're getting experience in your field through duty assignments, co-ops, rotational assignments and volunteer opportunities.

Both service members and veterans should access their Joint Service Transcript (JST) for an in-depth overview of their qualifications and experience gained through military service. For veterans using their VA education benefits, consider contacting your local Veterans organizations for work study opportunities.

If an advanced engineering degree fits your goals and experience, it pays to [research your benefits](#) through the GI Bill and tuition assistance. If you can earn a degree while on active duty, you likely won't lose benefits for future use. It pays to look for a program that can directly pair your unique military experience with civilian expectations, either through partnerships or veteran faculty. Finding an advanced degree program that is flexible, valuable and efficient is your best bet.



Begin your decision-making with these key links:

- [VA & GI Bill benefits \(VA\)](#)
- [Job market for advanced degrees \(Military.com\)](#)
- [Ranks requiring master's degrees \(Career Trend\)](#)
- [10 career-critical master's degrees \(Military Times\)](#)
- [Is a master's degree worth it \(Military.com\)](#)

This information is provided by the Department of Industrial & Manufacturing Engineering at the FAMU-FSU College of Engineering.

For more information, contact us at gradstudies@eng.famu.fsu.edu