

Start Your **FUTURE**  
*with the*  
**CAREER**  
*of the Future*

The Undergraduate Degree  
in Systems Engineering

it's anything

you can imagine



The Vogenau School of  
Information Technology and Engineering  
Systems Engineering  
and Operation Research (SEOR)

[www.seor.gmu.edu](http://www.seor.gmu.edu)

# Imagine

## *an engineering degree*

that allows you to work on a national emergency response system, improve techniques for cancer treatments, or help shape national policy decisions.

This is the Bachelors Degree in Systems Engineering (SE) at George Mason University – an in-demand degree combining mathematics, statistical analysis, problem solving and computer programming with an understanding of economics, human behavior, and public policy.

Traditional engineering studies have a narrow focus such as electronics, software, or hardware. Systems engineers are the big picture people who take a broader look on all parts of a system to ensure that they work together.

SE is a valuable passport to a rewarding career in engineering or business within both industry and government

*If you like working with people,*

*If you are interested in mathematics, computers, and statistics,*

*If you wish to combine the technical depth of engineering  
with a foundation in business,*

*If you are interested in working in a field where you can effect real change,*

*SE may be right for you.  
George Mason University  
is the place to study.*

**Systems Engineering  
at George Mason University**

**More than a program of study...**

*A program for* **Life**





# *Inside* systems engineering at George Mason University

Our nationally recognized program reflects the systems engineer's unique perspective that considers all aspects of a system from initial concepts, budget requirements, human use, training needs, system purpose, system integration, and system longevity.

The 120-credit BS/SE program includes systems engineering methods and tools, engineering foundations, processes, and architectures, human engineering, project management, simulation, and optimization combined with mathematics, natural sciences computing, writing, humanities, and social sciences.

With your foundation in place, you pick a specialization that will hone your technical skills:

- Control Systems
- Engineering Systems
- Operations research
- Network Systems
- Software Intensive Systems
- aviation



## *Award-Winning and* career-building

The program culminates in a unique and exciting year-long senior design project.

You will work on a small team on an industry-sponsored project that is a challenging open-ended problem for a complex large-scale system. You will integrate your knowledge of technical, economic, political, managerial, and environmental aspects for the preliminary design of this system while meeting the satisfaction of the client, a real-world skill that can only be learned through hands-on training.

*Our BS/SE student teams have received numerous national awards.*

## move on the fast track *with an Accelerated Masters Degree*

Qualified students may apply for an accelerated 144 credit hour program leading to a BS in systems engineering and an MS degree in systems engineering or operations research.

Our program is accredited by ABET, Inc.

# student *Life*

## *Become Part of the Mason Nation!*



George Mason is an "Entrepreneurial University," with cutting-edge degree programs and renowned faculty. With close to 30,000 students participating in over 175 student-led organizations, 27 Greek organizations, and 250 student athletes competing in 20 men's and women's Division I sports, there truly is something for everyone.

### *Systems Engineering Society (SES)*

The SES Society works to increase the recognition of the Systems Engineering profession; provide career development opportunities for SE; foster a sense of community; and develop a liaison between SE students, faculty, and administration at George Mason University

### *Fast Facts:*

The Metro DC Region has the largest concentration of Systems Engineers in the nation.

George Mason University is one of the largest universities in Virginia but retains a small-campus feel within a few miles from Washington, D.C.

SEOR students work with world-renowned faculty and have exposure to real-world systems, and interact with industry professionals.

Mason students enjoy outstanding, well-paid career opportunities in the Washington, D.C. Metropolitan area high-tech economy.

### *Four Campuses, One Home*

With campuses in Fairfax, Prince William, Loudon and Arlington, George Mason University students come from all over. For about 4,000 residential students, George Mason University is truly their home. The Fairfax campus has four housing options available to undergraduate students and provides services for students seeking off-campus living arrangements.



## *Ready to learn more?*

Visit [www.seor.gmu.edu](http://www.seor.gmu.edu) for complete program and course listings, faculty bios, student activities, and much more about being part of the Mason Nation.



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