MINOR IN OPERATIONS RESEARCH

The Systems Engineering program at GW is designed to provide a broad and solid education in the basics of mathematical modeling, software and information systems, and the treatment of uncertainty. In this program, you learn to apply engineering techniques and mathematical methods to assist decision makers in designing and operating systems optimally. You learn to do this by observing, understanding, modeling, and predicting the behavior of the systems that naturally arise in fields as diverse as medicine, defense, manufacturing, and management. Our students take part in professional societies—such as GW's student chapter of INFORMS (Institute for Operations Research and the Management Sciences)—and have multiple opportunities to connect with our alumni network, leading to internships. With a broad array of options open to systems engineers, our students have gone on to intern as well as start their careers in many fields, including communications, energy, environment, finance, health care, information technology, marketing, national defense, project management, software development, or transportation.

Visit the program website (http://www.emse.seas.gwu.edu/bachelor-arts-applied-science-technology) for additional information.

ADMISSIONS

For more information on the admission process, please visit the Office of Undergraduate Admissions website. Applications may be submitted via the Common Application.

Supporting documents not submitted online should be mailed to:
Office of Undergraduate Admissions
The George Washington University
800 21st Street NW, Suite 100
Washington DC 20052

Contact for questions:
gwadm@gwu.edu or 202-994-6040

REQUIREMENTS

This Bulletin covers the degree requirements for students matriculating in the current academic year. Students who matriculated before the current year can find their requirements in the relevant archived Bulletin (http://archives/).

Code	Title	Credits
Prerequisites		
The following courses must be completed before beginning the minor program:		
APSC 3115	Engineering Analysis III	
MATH 2233	Multivariable Calculus	
Minor requirements		
Required		
EMSE 3740W	Systems Thinking and Policy Modeling	
EMSE 3760	Discrete Systems Simulation	
EMSE 3850	Quantitative Models in Systems Engineering	
EMSE 4765	Data Analysis for Engineers and Scientists	
Electives		
Two additional EMSE courses (6 credits) selected in consultation with the minor advisor. *		

* Common elective course selections include EMSE 2705 Mathematics of Operations Research, EMSE 4710 Applied Optimization Modeling, EMSE 4755 Quality Control and Acceptance Sampling, and EMSE 4770 Techniques of Risk Analysis and Management.