

SYSTEMS ENGINEERING

B.S., M.S., PH.D.

School of Engineering
& Applied Science

THE GEORGE WASHINGTON UNIVERSITY

Systems Engineering is an interdisciplinary field of engineering that focuses on how to design and manage complex engineering systems. System Engineers are typically responsible for ensuring system requirements are met and reliable. They also deal with work-processes, optimization methods, and risk management tools during projects. Their job usually overlaps technical expertise with human-centered disciplines such as control engineering, industrial engineering, software engineering, organizational studies, and project management. Systems Engineers ensure that all aspects of a project or system are considered and integrated efficiently into a system as a whole.

KEY SKILLS & SAMPLE JOBS

- Design new production processes in order to reduce the use of materials, time, or labor
- Identify strengths and weaknesses of alternative solutions
- Listen carefully to feedback from customers, vendors, and production staff
- Manage several issues at once, from workers' safety to quality assurance

Sample Job Titles: Industrial Engineer, Operations Engineer, Process Engineer, Production Engineer, Supply Chain Engineer, Human Factors Engineer

ENGINEERING MANAGEMENT & SYSTEMS ENGINEERING DEPARTMENT

12 full-time faculty

\$1.1 million annual research expenditures

One of the largest engineering management and systems engineering programs in the U.S.

DEPARTMENT ENROLLMENT

94 undergraduate

402 graduate

RESEARCH AREAS

Engineering and Technology Management

Systems Engineering

Environmental and Energy Management

Information Assurance

Crisis, Emergency and Risk Management

Operations Research

Economics, Finance and Cost Engineering

Knowledge and Information Management

EMPLOYERS

WHO HAVE HIRED GW STUDENTS

Huntington Ingalls Industries

Leidos

Northrup Grumman

Pacific Gas & Electric

Pricewaterhouse Coopers

U.S. Patent & Trademark Office

2018 CAREER OUTCOMES

92%

92% of SEAS students were satisfied with the career programs and services

71%

71% of systems engineering seniors were employed or enrolled in graduate school within 6 months

\$

\$68,000 median salary for systems engineering undergraduates

43% of systems engineering graduate students earned a salary of \$100,00 or more

W. SCOTT AMEY CAREER SERVICES CENTER

careers.seas.gwu.edu

seascareers@gwu.edu