

DOCTOR OF ENGINEERING IN THE FIELD OF SYSTEMS ENGINEERING - ONLINE

The doctor of engineering (DEng) in systems engineering addresses the widespread need for practitioners who can apply knowledge from the program of study in a business or technical environment. The DEng student engages a practical problem and takes a new approach to its resolution, applying advanced systems engineering theories and practices to research and recommend a useful solution. The DEng degree empowers the student—who is likely already a practicing engineer—to create advanced, hands-on treatments of complex systems engineering problems.

ADMISSIONS

Admissions Completed GW application for graduate admission Requirements:

Bachelor’s and master’s degrees (the program does not allow for direct entry students) in engineering, applied science, mathematics, computer science, information technology or related field from accredited institutions
A minimum graduate level GPA of 3.2
3 years relevant professional experience preferred
Up-to-date resume
Standardized TOEFL, IELTS, or PTE scores are required of all test scores: applicants who are not citizens of countries where English is the official language. Check our International Students Page: https://graduate.engineering.gwu.edu/international-admissions (https://graduate.engineering.gwu.edu/international-admissions/) learn about the SEAS English language requirements and exemption policy. Test scores may not be more than two years old.

REQUIREMENTS

The following requirements must be fulfilled: 48 credits, including 24 credits in required courses and 24 credits in research culminating in a practice-based praxis.

Note: Throughout the program, students must take required courses in lockstep with the cohort of students with which they matriculated

Code	Title	Credits
Required courses		
SEAS 8215	Uncertainty Modeling	
SEAS 8225	Computational Modeling	
SEAS 8305	Advances in Systems Engineering	

SEAS 8310	Systems Integration
SEAS 8315	Digital Engineering
SEAS 8399	Praxis Development for Systems Engineering
Research phase	
SEAS 8388	Praxis Research for Doctor of Engineering in Systems Engineering (taken for a total of 24 credits)

Additional requirements

1. Students must earn a minimum grade of B- in all courses and must achieve a minimum GPA of 3.2 at the completion of their coursework to advance to the research phase.
2. Students must complete the final examination on their praxis by preparing and defending their praxis before a committee of three faculty members. Students have a maximum of two attempts to pass the final defense.