

DOCTOR OF ENGINEERING IN THE FIELD OF ENGINEERING MANAGEMENT (STEM, ONLINE)

The doctor of philosophy in engineering management degree program is designed for individuals who aim to conduct groundbreaking research in the field of engineering management. The program culminates in a dissertation that adds original knowledge or understanding to the field of engineering management. This research is typically characterized by a strong analytical and problem-solving focus, addressing issues in areas such as innovation management, decision analytics, project and risk management, sustainability, or technology policy. The program is offered in a synchronous, online format with classes held on Saturdays. This format enables professionals who are employed full-time to pursue advanced study in a focused environment alongside like-minded fellow students.

Visit the program website (<https://online.engineering.gwu.edu/online-doctor-engineering-engineering-management/>) for additional information.

ADMISSIONS

Application: A completed GW application for graduate admission.

Prior academic records: Bachelor's and master's degrees in engineering, applied science, mathematics, computer science, information technology or related field from accredited institutions.

A minimum graduate-level GPA of 3.5.

A grade of C or above in the first two undergraduate calculus courses.

Standardized test scores: TOEFL, IELTS, or PTE scores are required of all applicants who are not citizens of countries where English is the official language. Information concerning the English language requirements and exemption policy is available on the School of Engineering and Applied Science international students webpage at <https://graduate.engineering.gwu.edu/international-admissions> (<https://graduate.engineering.gwu.edu/international-admissions/>). Test scores cannot be more than two years old.

Visit the SEAS Online website (<https://online.engineering.gwu.edu/online-doctor-engineering-engineering-management/>) for additional information.

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 8205	Cybersecurity for Engineers	
SEAS 8210	AI and Technology Management	
SEAS 8215	Uncertainty Modeling	
SEAS 8220	Data Science	
SEAS 8225	Computational Modeling	
SEAS 8299	Praxis Development for Engineering Management	
Research phase		
EMSE 8999	Dissertation Research (taken for a total of 36 credits)	

Additional requirements

To advance to the research phase, students must achieve a minimum GPA of 3.4 with no grade below *B-* at the completion of their coursework.

Students must submit an article based on the results of the dissertation research to an approved, refereed conference or scholarly journal. Credit must be given in the publication to the fact that the material is abstracted, summarized, or developed from a dissertation submitted to the George Washington University in partial fulfillment of the requirements for the doctor of philosophy degree. Before the candidate is permitted to defend the dissertation, this original article must be accepted for publication in the conference proceedings or journal.

Students must successfully defend their dissertation before a committee of five faculty members within five years from the start of the program. Students have a maximum of two attempts to pass their dissertation defense. When the committee is convinced of the quality and originality of the candidate's contribution to knowledge as well as his or her mastery of the scholarship and research techniques of the field, the committee recommends the candidate for the degree of doctor of philosophy.