# DOCTOR OF ENGINEERING IN THE FIELD OF ENGINEERING MANAGEMENT (STEM)

Designed for the technical manager who needs a broad education to keep an organization operating efficiently and working ahead of its competitors, GW's engineering management program provides graduate education in the most current management techniques for technological and scientific organizations.

Graduate students can pursue their degrees in one of the following focus areas: crisis, emergency, and risk management; economics, finance, and cost engineering; engineering and technology management; environmental and energy management; and knowledge and information management.

The doctoral program, tailored for each student, is designed to provide the ability to perform substantive research in an area of the student's choice. Students benefit from working closely with faculty whose applications research has been successfully used by major organizations.

This is a STEM designated program.

Visit the program website (https://graduate.seas.gwu.edu/phd-ordeng-engineering-management/) for additional information.

# ADMISSIONS

The admission requirements below are for the on-campus program. Admission requirements for the online program are available at the online programs website (https://seasonline.gwu.edu/apply/ deng-em/).

Admission deadlines:	Fall – January 15
	Spring – September 1
	Summer* – March 1 (non-F1 visa seeking applicants)
Standardized test scores:	dThe Graduate Record Examination (GRE) is required of all applicants to the main GW campus (Institution code 5246).
	The Test of English as a Foreign Language (TOEFL), the academic International English Language Testing System (IELTS), or the PTE Academic is required of all applicants except those who hold a bachelor's, master's, or doctoral degree from a college or university in the United States or from an institution located in a country in which English is the official language, provided English was the language of instruction. Minimum scores:
	- Academic IELTS: an overall band score of 7.0 with no individual score below 6.5; or
	- TOEFL: 600 on paper-based or 100 on Internet- based; or
	- PTE Academic: 68.

Recommendations required. If possible, one

required: recommendation should be from your advisor at the institution from which you earned your highest degree.

Prior Transcripts are required from all colleges and academic universities attended, whether or not credit records: was earned, the program was completed, or the credit appears as transfer credit on another transcript. Unofficial transcripts from all colleges and universities attended must be uploaded to your online application. Official transcripts are required only of applicants who are offered admission.

> If academic records are in a language other than English, a copy in the original language and an English language translation must be uploaded. Transcript evaluations should not be uploaded. Applicants who have earned a degree from an Indian university are required to submit individual semester marksheets.

Statement of The statement of purpose essay is optional. purpose:

Additional Master's degree with a GPA of at least 3.2 on a 4.0. requirements scale; two or more college-level calculus courses

	passed with grades of B- or better; five years of relevant professional experience; and suitable	
		bachelor's and master's degrees in engineering, applied science, mathematics, computer science, physics or a related field are required.
		All applicants must submit a resumé or CV. All on- campus applicants must choose an area of focus that most closely matches their interests and note this on the online application.
	International applicants only:	Please follow this link - https:// graduate.admissions.gwu.edu/international- student-application-requirements (https:// graduate.admissions.gwu.edu/international-

student-application-requirements/) - to review the International Applicant Information carefully for details on required documents, earlier deadlines for applicants requiring an I-20 or DS-2019 from GW.

\* A limited number of doctoral applicants are accepted for the summer. Please contact the admissions office for details. International applicants who require a visa from GW are eligible to apply for admission in fall and spring only (not summer).

For additional information about the admissions process visit the SEAS Admissions Frequently Asked Questions (https:// graduate.engineering.gwu.edu/admissions-frequently-askedquestions/) page.

Contact for questions:

engineering@gwu.edu

202-994-1802 (phone) 202-994-1651 (fax)

## REQUIREMENTS

The following requirements must be fulfilled: 45 credits, including 9 credits in required courses, 21 credits in elective courses, and 15 credits in research culminating in a practice-based case study.

Code	Title	Credits
Required		
EMSE 6765	Data Analysis for Engineers and Scientists	
EMSE 6992	Special Topics	
EMSE 8100	The Praxis Proposal	

### Electives

21 credits in approved elective courses, of which a minimum of 6 credits must be in EMSE analytical methods courses and a minimum of 9 credits must be in EMSE management courses.

#### Praxis

EMSE 8199	Praxis Research (taken for a total of 15
	credits)

- 1. Students must have a minimum GPA of 3.2 at the completion of their coursework in order to advance to the research phase.
- 2. Students must complete the praxis proposal examination by preparing and defending their proposal before a committee of three members, at least two of which must be full-time members of the SEAS faculty. Students have a maximum of two attempts to pass the proposal defense.
- 3. Students must complete the final examination on their praxis by preparing and defending their praxis before a committee of three members, at least two of which must be full-time members of the SEAS faculty. Students have a maximum of two attempts to pass the final defense.