

GRADUATE CERTIFICATE IN SYSTEMS ENGINEERING

Systems management combines the study of systems engineering with that of engineering management. Students in the program complement their technical knowledge with managerial skill and learn how to lead the process of change in technically-oriented organizations. The program also helps managers to apply the power of systems engineering to administering their enterprise. The combined study of systems and management affords engineers an understanding of managerial roles, and equips managers to formulate, analyze, and execute decisions in engineering, technical and other scientific organizations. If successfully completed, students may apply the 12 credits earned in this certificate program toward the 36-credit master of science in the field of systems engineering degree.

Visit the Department Engineering Management and Systems Engineering (<https://www.emse.seas.gwu.edu/graduate-certificates/>) website for additional information.

ADMISSIONS

Admission deadlines:

Fall – January 15
Spring – September 1
Summer – March 1

Standardized test scores:

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 6.0 with no individual score below 5.0; or
- TOEFL: 550 on paper-based or 80 on Internet-based; or
- PTE Academic: 53.

Applicants with lower test scores may qualify for our full-time Applied English Studies program.

Prior academic records:

Transcripts are required from all colleges and universities attended, whether or not credit 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 with degrees from Indian universities should upload transcripts and/or detailed marksheets.

Statement of purpose:

In an essay of 250 to 500 words, state your purpose in undertaking graduate study at The George Washington University; describe your academic objectives, research interests, and career plans; and discuss your related qualifications, including collegiate, professional, and community activities, and any other substantial accomplishments not already mentioned.

Additional requirements:

Applicants should possess an undergraduate degree in engineering, the physical sciences, or applied mathematics.

International applicants only:

International applicants requiring a visa from GW are not eligible to apply for admission to this program, but may apply for the MS, PhD, or a professional degree (AppSc or Engr) in systems engineering.

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

Contact for questions:

engineering@gwu.edu

202-994-1802 (phone)

202-994-1651 (fax)

Hours: 9:00 am to 5:00 pm, Monday through Friday

REQUIREMENTS

The following requirements must be fulfilled: 18 credits in required courses.

Code	Title	Credits
Required		
EMSE 6001	The Management of Technical Organizations	
EMSE 6020	Decision Making with Uncertainty	
EMSE 6540	Management of Information and Systems Security	
EMSE 6801	Systems Engineering I	
EMSE 6805	Systems Engineering II	
EMSE 6820	Program and Project Management	