Doctor of Engineering
in
Engineering Management.

Information Session
Thursday, October 5, 2023

Cohort Begins
January 2024

Shahram Sarkani, Ph.D., P.E.
Director, Online Engineering Programs
Professor of Engineering Management and Systems Engineering
Information Session Agenda

✓ Overview of The George Washington University

✓ Doctor of Engineering (D.Eng.) in Engineering Management.
  • Overview
  • Academic Requirements
  • Application Information

✓ Q & A Session
The George Washington University

- Chartered in 1821 by an Act of Congress
- 10 colleges and schools, including the School of Engineering & Applied Science
- More than 15,000 graduate students
- Alumni network of over 300,000 living alumni in more than 130 countries
- Accredited by the Middle States Commission on Higher Education
- GW’s Online Graduate Engineering Masters Programs ranked #12 by US News
Our Online Program

• We offer 6 Masters and 4 Doctoral degrees fully online. The online degrees are identical to their on-campus equivalents.

• Online classes meet synchronously via Zoom and are recorded for viewing throughout the semester

• Supported by Blackboard, GW's web-based course management software

• Exams are taken through a secure testing platform
Doctor of Engineering

Engineering Management

Engineering Management (EM) bridges the gap between engineering and management. EM enables engineers to work most effectively in the business environment.

Graduates of this program are equipped to lead in such areas as management of technology, product and process, quality, organizational management, operations management, program management, marketing and finance.
Program Overview

• Classroom Phase (24 credit hours)
  • 8 graduate-level, 3-credit-hour courses

• Research Phase (24 credit hours)
  • Culminates in Praxis defense

• Total of 48 credit hours

• Program Begins: January 2024

• Target Graduation Date: December 2025
Curriculum

EMSE 6025 Entrepreneurship and Technology (3 CH)
EMSE 6030 Technological Forecasting and Management (3 CH)
EMSE 6420 Uncertainty Analysis in Cost Engineering (3 CH)
EMSE 6767 Applied Data Analytics (3 CH)
EMSE 6790 Logistics Planning (3 CH)
EMSE 8030 Risk Management Process (3 CH)
EMSE 8099 Survey of Research Formulation for Eng. Mgmt. (3 CH)
EMSE 8100 The Praxis Proposal (3 CH)
EMSE 8199 Praxis Research (24 CH minimum)

Schedules, regulations and policies subject to change; course substitution in the curriculum is usual and should be expected.
Coursework Calendar

No classes on Memorial Day Weekend

• Each course consists of 10 class meetings on Saturdays:
  • Morning Class 9:00a-12:00p (Eastern)
  • Afternoon Class 1:00p-4:00p (Eastern)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Session</th>
<th># Courses</th>
<th># Credit Hours</th>
<th>Session Dates</th>
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<tbody>
<tr>
<td>Spring 2024</td>
<td>First</td>
<td>2</td>
<td>6</td>
<td>January 6—March 9, 2024</td>
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<tr>
<td></td>
<td>Second</td>
<td>2</td>
<td>6</td>
<td>March 23—June 1, 2024</td>
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<tr>
<td>Summer 2024</td>
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<td>2</td>
<td>6</td>
<td>June 15—August 17, 2024</td>
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<tr>
<td>Fall 2024</td>
<td>First</td>
<td>2</td>
<td>6</td>
<td>August 31—November 2, 2024</td>
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Academic Requirement

• Each course is graded on a curve so that every course ends with a GPA of approximately 3.6

• After completion of the classroom phase with a GPA of 3.2 or higher, and no grade below B-, students begin praxis research

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<thead>
<tr>
<th>Grade</th>
<th>GPA Pts</th>
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<tbody>
<tr>
<td>A</td>
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<tr>
<td>A-</td>
<td>3.7</td>
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<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
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Research Requirements

- Praxis Research
  - Research courses consist of minimum half-hour individual meetings with your advisor initially every other week
  - During this stage, students will develop and write a praxis
  - Praxis defenses are scheduled for the end of the final semester of research

- Research course EMSE 8199 Praxis Research (24 CH)
  - Session I: Fall 2024, 3 credit hours
  - Session II: Spring 2025, 9 credit hours
  - Session III: Summer 2025, 3 credit hours
  - Session IV: Fall 2025, 9 credit hours
Sample Praxis Research Areas

Sample Praxis Titles from Previously Published D.Eng. in Engineering Management Praxes:

- A Technology Maturity Assessment of Sustainment-Dominated Systems under the Influence of Obsolescence
- A Generalized Approach to Measure and Predict Innovation Maturity Progression Aligned to Business Objectives
- Reducing Time and Cost Overruns for Aerospace Development Programs Using Precedence Networks Patterns
- Identifying and Overcoming the Barriers to Cloud Adoption within the Government Space
- A Decision Support Tool for Designing Energy-efficient Residential Buildings at the Early Planning and Design Stage
Admissions Requirements

• 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 3.2

• Relevant professional experience

• A minimum of two college-level calculus courses
  • Applicants who do not have a grade of C or better in two calculus courses but are otherwise qualified for admission will be required to take an additional course EMSE 4197 – Analytical Methods for Engineering
  • Offered Nov. 4 – Dec. 23, 2023 on Tuesdays from 7:00 – 9:30pm and Saturdays from 9:00 am – Noon, 1:00 – 4:00 pm (No class on Sat. Nov. 25)
Application Process

Apply online at: https://seasonline.gwu.edu/apply/deng-em

Send Official Academic Transcripts Directly from the Institution to:

- Electronic Transcripts:
  EMdoctorate@gwu.edu

- Paper Transcripts:
  Online Engineering Programs Office
  The George Washington University
  170 Newport Center Drive, Suite 260
  Newport Beach, CA 92660

All submitted materials remain property of GW Online Engineering Programs
If you attended prior institutions that use Parchment Transcript Services:

Send transcripts to this address to ensure receipt.
Rolling Application Deadline: **November 15, 2023 (or when the cohort is full)**
Admitted Students

- Admission decisions are communicated via email.
- Admitted applicants must return a reply card and a non-refundable tuition deposit of $995 (applied to the first session’s tuition) in order to secure their slot in the cohort.
- Tuition is $1,625 per credit
Contact Information

Online Engineering Programs Office
Shahram Sarkani, Ph.D., P.E., Director

- **Admissions Team**
  - EMdoctorate@gwu.edu
  - Tel: 833-330-1454

- **Doctoral Administrative Team**
  - seasdoc@gwu.edu

- **Online Technical Support Team**
  - seasonline@gwu.edu
  - Tel: 202-422-2806
Answers to Frequently Asked Questions

• Transfer credit is not allowed toward doctoral programs.
• Students should expect to spend approximately 20 hours a week on coursework/research, including class attendance.
• Your research topic will be finalized during your last session (EMSE 8100–Praxis Development for EM)
• Your research advisor will be assigned by the Online Engineering Programs Office after the successful completion of your coursework.
Any Questions?

To protect your privacy, questions regarding individuals’ specific application, degrees, background, or experience will not be answered during this Q&A session.