Why a Graduate Certificate in Systems Engineering?

Systems engineering is an essential part of the way the world works today. It combines several skill areas — people, facilities, policies, hardware, software and documents — into an integrated discipline that combines human factors, technology, process engineering and management.

A graduate-level certificate in systems engineering is ideally suited to students who

- Are limited by time and resources and/or corporate sponsorship and are only able to commit to a 15 semester credit hour program
- Want to pursue systems engineering as a secondary interest
- Are getting degrees in other fields but would like to get a GCSE at the same time

Credits earned may also be applied towards a master’s degree.

Opportunities in systems engineering are available in a wide range of industries including manufacturing, aerospace, defense, healthcare, electronics, automotive, education, software, government and other sectors that have a need for people who can understand and manage complex systems.
Admissions Requirements
To qualify for admission into the Graduate Certificate in Systems Engineering, you must:

- Complete and submit a graduate admissions application and application fee
- Have a bachelor’s degree from an accredited university
- Submit official transcripts in accordance with the requirements of the Graduate School
- Write a brief statement of purpose
- Provide two letters of recommendation from individuals who can evaluate your ability to succeed in a rigorous graduate program, including one from the company sponsoring you (if appropriate)
- Provide other evidence of relevant personal or professional experience

Recommendations for admission are made on the basis of the following:

- GPA in upper-division or graduate work, as appropriate
- Professional commitment and interest as demonstrated by the personal statement and other supporting materials as available
- Letters of recommendation
- Leveling courses if applicable

International students must also submit:

- Official TOEFL (Test of English as a Foreign Language) scores

Curriculum

Core Coursework

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SE 5341</td>
<td>Systems Engineering Fundamentals</td>
</tr>
<tr>
<td>SE 5342</td>
<td>Systems Engineering Management</td>
</tr>
<tr>
<td>SE 5343</td>
<td>Systems Requirements Analysis</td>
</tr>
<tr>
<td>SE 5344</td>
<td>Systems Integration, Verification &amp; Validation</td>
</tr>
<tr>
<td>SE 5345</td>
<td>Systems Engineering Project Practicum</td>
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</tbody>
</table>

Total Credits: 15

Note: Curriculum is subject to change.