Graduate Certificate in Systems Engineering

The Graduate Certificate in Systems Engineering requires 12 Semester Credit Hours (SCH) of coursework plus a three-hour Project Practicum with industry.

The program is offered online through UTEP Connect. ([https://www.utep.edu/extendeduniversity/utepconnect/](https://www.utep.edu/extendeduniversity/utepconnect/))

**Admission Requirements**

Students should consult the College of Engineering section in the Graduate Catalog for information on general admission requirements. Applicants are expected to have a Bachelor of Science degree in an engineering, computing, or physical science field, or the equivalent. Depending on qualifications for study, students might need to complete leveling coursework at the undergraduate level. These courses will not be counted towards the GCSE.

Applicants will apply through the Graduate School, submitting an application form and the following supporting materials:

- Official transcripts of all previous academic work.
- Official scores on the Test of English as a Foreign Language (TOEFL), if appropriate.
- Personal statement of purpose.
- Letters of recommendation, including one from the company sponsoring the student (if appropriate).
- Other evidence of relevant personal or professional experience.

Recommendations for admissions will be made on the basis of the following:

- Grade point average in the 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**

The admissions committee will review the records of applicants admitted without degrees in engineering, computing, or physical science fields and will determine any deficiencies. The committee will then make specific recommendations for leveling courses or for testing to determine the adequacy of preparation. Leveling courses will not be applied toward the GCSE requirements.

**Degree Plan**

The GCSE is a 15-semester-credit-hour (SCH) program. Each student is expected to acquire core knowledge in key areas of Systems Engineering. All students are required to complete the following five core courses (15 SCH) with a B average or better and with no more than one C.

**Required Credits: 15**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 5381</td>
<td>Systems Engineering Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EE 5342</td>
<td>Systems Engineering Mgmt</td>
<td>3</td>
</tr>
<tr>
<td>EE 5343</td>
<td>Requirements Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EE 5344</td>
<td>Integrtn, Verifctn, Validatn</td>
<td>3</td>
</tr>
<tr>
<td>ECE 5395</td>
<td>Practicum in Elect &amp; Comp Eng</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

These courses can be applied toward a Master of Science in Systems Engineering degree.