# CHEMICAL ENGINEERING, MINOR

## Minor Requirements (18 Hours)

The Chemical Engineering minor requires:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Courses (12 hours):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECHE 300</td>
<td>Chemical Process Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECHE 311</td>
<td>Chemical Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ECHE 320</td>
<td>Chemical Engineering Fluid Mechanics</td>
<td>3</td>
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<tr>
<td>or ENCP 360</td>
<td>Fluid Mechanics</td>
<td></td>
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<tr>
<td>ECHE 440</td>
<td>Separation Process Design</td>
<td>3</td>
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</tbody>
</table>

**Chemical Engineering Minor Electives (6 hours) : 6 additional hours selected from:**

- ECHE 372  Introduction to Materials
- ECHE 389  Special Topics in Chemical Engineering
- ECHE 521  Computational Fluid Dynamics for Engineering Applications
- ECHE 571  Corrosion Engineering
- ECHE 572  Polymer Processing
- ECHE 573  Next Energy
- ECHE 575  Engineering of Soft Materials
- ECHE 589  Special Advanced Topics in Chemical Engineering

**Minor Electives that do not require MATH 242**

- ECHE 321  Heat-Flow Analysis ¹
- ECHE 430  Chemical Engineering Kinetics ²
- ECHE 456  Computational Methods for Engineering Applications ³
- ECHE 550  Chemical-Process Dynamics and Control ⁴

**Total Credit Hours** 18

¹ Requires MATH 242 as a pre-requisite, and ECHE 456 as a pre-requisite or co-requisite
² Requires ECHE 321 as a pre-requisite or co-requisite, or BMEN 354 as a pre-requisite.
³ Requires MATH 242 as a pre-requisite or co-requisite
⁴ Requires both MATH 242 and ECHE 456 as a pre-requisites