# 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>
</tr>
<tr>
<td>ECHE 440</td>
<td>Separation Process Design</td>
<td>3</td>
</tr>
<tr>
<td><strong>Chemical Engineering Minor Electives (6 hours) : 6 additional hours selected from:</strong></td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

### Minor Electives that do not require MATH 242

- 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 require MATH 242 as pre-requisite

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

**Total Credit Hours** 18

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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 pre-requisites.