**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>
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<tr>
<td>ECHE 300</td>
<td>Chemical Process Principles</td>
<td>3</td>
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<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>
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<tr>
<td>ECHE 440</td>
<td>Separation Process Design</td>
<td>3</td>
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</tbody>
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**Chemical Engineering Minor Electives (6 hours) : 6 additional hours selected from:**

- 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