POLYMER SCIENCE, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

Program Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Requirements for the Minor</td>
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Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (https://senate.psu.edu/students/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

### Prescribed Courses

**Prescribed Courses: Require a grade of C or better**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 210</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Calculus of Several Variables</td>
<td>2</td>
</tr>
<tr>
<td>MATSE 443</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Additional Courses

**Additional Courses: Require a grade of C or better**

Select 3 credits of the following: 3

- BMB 474  Analytical Biochemistry
- EMCH 446  Mechanics of Viscoelastic Materials
- MATSE 447  Rheology and Processing of Polymers
- MATSE 473  Polymeric Materials Laboratory-Synthesis
- MATSE 474  
- MATSE 494W  Research and Design Senior Project
- MATSE 496  Independent Studies

Select 12 credits of the following: 12

- MATSE 441  Polymeric Materials I
- MATSE 442  
- MATSE 444  
- MATSE 445  Thermodynamics, Microstructure, and Characterization of Polymers
- MATSE 446  Mechanical and Electrical Properties of Polymers and Composites