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>
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<tr>
<th>Requirement</th>
<th>Credits</th>
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<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/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<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>
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<tr>
<td>MATSE 443</td>
<td>Introduction to the Materials Science of Polymers</td>
<td>3</td>
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Additional Courses:

Select 3 credits of the following:  

- 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:  

- 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

Prescribed Courses:

Prescribed Courses: Require a grade of C or better

- CHEM 210 Organic Chemistry I
- MATH 231 Calculus of Several Variables
- MATSE 443 Introduction to the Materials Science of Polymers