CHEMISTRY, 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>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements for the Minor</td>
<td>26-28</td>
</tr>
</tbody>
</table>

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>
</tr>
</thead>
</table>
| Prescribed Courses: Require a grade of C or better
CHEM 110   | Chemical Principles I                          | 3       |
CHEM 111   | Experimental Chemistry I                        | 1       |
CHEM 112   | Chemical Principles II                          | 3       |
CHEM 113   | Experimental Chemistry II                       | 1       |
CHEM 210   | Organic Chemistry I                             | 3       |
CHEM 212   | Organic Chemistry II                            | 3       |
CHEM 213   | Laboratory in Organic Chemistry                 | 2       |

Additional Courses: Require a grade of C or better
Select one of the following: 4-6

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 227</td>
<td>Analytical Chemistry</td>
<td></td>
</tr>
</tbody>
</table>
CHEM 450   | Physical Chemistry - Thermodynamics             |         |
& CHEM 452  | and Physical Chemistry - Quantum Chemistry      |         |
CHEM 466   | Molecular Thermodynamics                        |         |
& CHEM 452  | and Physical Chemistry - Quantum Chemistry      |         |

Select 6 credits from 400-level CHEM not used above (excluding CHEM 494, CHEM 494H, CHEM 495, and CHEM 496) 6