GEOPHYSICS, 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>29-32</td>
</tr>
</tbody>
</table>

Requirements for the Minor

The minor consists of 18-20 credits satisfying the requirements below.

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).

Code | Title | Credits
---|---|---
**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>GEOSC 1</td>
<td>Physical Geology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 140</td>
<td>Calculus With Analytic Geometry I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 212</td>
<td>General Physics: Electricity and Magnetism</td>
<td>4</td>
</tr>
</tbody>
</table>

**Additional Courses** 18-21

Non-Geoscience Majors

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOSC 203</td>
<td>Physical Processes in Geology</td>
<td></td>
</tr>
<tr>
<td>Select 3 credits from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EARTH 2</td>
<td>The Earth System and Global Change</td>
<td></td>
</tr>
<tr>
<td>EARTH 101</td>
<td>Natural Disasters: Hollywood vs. Reality</td>
<td></td>
</tr>
<tr>
<td>EARTH 105N</td>
<td>Environments of Africa: Geology and Climate Change</td>
<td></td>
</tr>
<tr>
<td>EARTH 106</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOSC 1</td>
<td>Physical Geology</td>
<td></td>
</tr>
<tr>
<td>GEOSC 10</td>
<td>Geology of the National Parks</td>
<td></td>
</tr>
<tr>
<td>GEOSC 40</td>
<td>The Sea Around Us</td>
<td></td>
</tr>
<tr>
<td>GEOSC 109H</td>
<td>Earthquakes and Society</td>
<td></td>
</tr>
<tr>
<td>Select 11-13 credits from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOSC 402Y</td>
<td>Natural Disasters</td>
<td></td>
</tr>
<tr>
<td>GEOSC 434</td>
<td>Volcanology</td>
<td></td>
</tr>
<tr>
<td>GEOSC 452</td>
<td>Hydrogeology</td>
<td></td>
</tr>
<tr>
<td>GEOSC 483</td>
<td>Environmental Geophysics</td>
<td></td>
</tr>
<tr>
<td>GEOSC 487</td>
<td>Analysis of Time Series</td>
<td></td>
</tr>
<tr>
<td>GEOSC 488</td>
<td>An Introduction to Seismology</td>
<td></td>
</tr>
<tr>
<td>GEOSC 489</td>
<td>Dynamics of the Earth</td>
<td></td>
</tr>
</tbody>
</table>

Geoscience Majors 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 212</td>
<td>General Physics: Electricity and Magnetism</td>
<td></td>
</tr>
<tr>
<td>Select 3-4 credits of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 220</td>
<td>Matrices</td>
<td></td>
</tr>
<tr>
<td>MATH 230</td>
<td>Calculus and Vector Analysis</td>
<td></td>
</tr>
<tr>
<td>MATH 231</td>
<td>Calculus of Several Variables</td>
<td></td>
</tr>
</tbody>
</table>

1 Geoscience majors may not double count these courses in their major.