# Geology B.S.

## Degree Requirements: 124 Credit Hours

*See Core Curriculum for required courses in Area A1 through Area E.*

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Requirements (Core A - E)</strong></td>
<td></td>
<td>42</td>
</tr>
<tr>
<td>Area A2</td>
<td>Must take MATH 1112, MATH 1113, or MATH 1441</td>
<td></td>
</tr>
<tr>
<td>Area DII</td>
<td>Must take MATH 1441 if not taken in Area A2 above</td>
<td></td>
</tr>
<tr>
<td>Additional Requirements</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Area F - Courses Appropriate to Major</strong></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>CHEM 1211K</td>
<td>Principles of Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 1211 &amp; 1211L</td>
<td>Principles of Chemistry I and Principles of Chemistry I Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 1212K</td>
<td>Principles of Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 1212 &amp; 1212L</td>
<td>Principles of Chemistry II and Principles of Chemistry II Laboratory</td>
<td></td>
</tr>
<tr>
<td>GEOL 1121</td>
<td>Introduction to the Earth</td>
<td>0,4</td>
</tr>
<tr>
<td>GEOL 1122</td>
<td>General Historical Geology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1103</td>
<td>Concepts of Biology</td>
<td>3</td>
</tr>
<tr>
<td>Additional hours as necessary may be substituted from Major Specific Courses listed below</td>
<td></td>
<td></td>
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<tr>
<td><strong>Major Specific Requirements</strong></td>
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<td></td>
</tr>
<tr>
<td>Carry over from MATH 1441 Calculus I in Area A or Area D</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Carry over from GEOL 1122 General Historical Geology in Area F</td>
<td>1</td>
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<tr>
<td>BIOL 1103L</td>
<td>Concepts of Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>or BIOL 1110L</td>
<td>Concepts of Biology Trad. Lab</td>
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<tr>
<td>MATH 2242</td>
<td>Calculus II</td>
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<tr>
<td>or STAT 2231</td>
<td>Introduction to Statistics I</td>
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<tr>
<td>PHYS 1111K</td>
<td>Introductory Physics I</td>
<td>0,4</td>
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<tr>
<td>or PHYS 2211K</td>
<td>Principles of Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 1112K</td>
<td>Introductory Physics II</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 2212K</td>
<td>Principles of Physics II</td>
<td></td>
</tr>
<tr>
<td><strong>Major Requirements</strong></td>
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<tr>
<td>GEOL 3520</td>
<td>Field Methods</td>
<td>2</td>
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<tr>
<td>GEOL 3541</td>
<td>Mineralogy</td>
<td>4</td>
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<tr>
<td>GEOL 3542</td>
<td>Petrology and Petrography</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 4120</td>
<td>Introduction to Research</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 5142</td>
<td>Stratigraphy and Sedimentation</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 5440</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td>Guided Elective</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Select Option 1 or Option 2 below:</td>
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<td>6</td>
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<tr>
<td><strong>Option 1</strong></td>
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</tr>
<tr>
<td>GEOL 4830</td>
<td>Senior Thesis Research I</td>
<td></td>
</tr>
<tr>
<td>GEOL 4831</td>
<td>Senior Thesis Research II</td>
<td></td>
</tr>
<tr>
<td><strong>Option 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 credit hours of 3000-level or above Geology electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(May include no more than 2 credit hours of GEOL 3790 - Teaching Internship in Geology, GEOL 5230 - Earth Science and GEOL 5231 - Oceanography may not be used to fulfill upper-level course requirements in the major.)</td>
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### Electives

<table>
<thead>
<tr>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select 7-22 credit hours of Electives (must include at least 7 credit hours of 3000-level and above coursework)</td>
<td>7-22</td>
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</tbody>
</table>

**Total Credit Hours**: 124

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1. While General Historical Geology (GEOL 1122) is 4 credit hours, only 3 credit hours will count toward fulfilling Area F. The remaining credit hour will be applied toward Major Specific Requirements.
2. Guided elective must be a 6 credit hour Geology field course - permission of advisor required.
3. Students pursuing Option 1 must have a minimum grade of B in Introduction to Research (GEOL 4120) and an overall GPA of 3.0 or higher upon completion of Introduction to Research (GEOL 4120), or permission of the Department Chair.
4. May be satisfied by a secondary school background showing three (3) years or more of preparation in a single language.

## Program Requirements

- Geology majors must maintain an overall 2.0 GPA across all Geology coursework (any course with GEOL prefix).

## Honors in Geology

Students majoring in Geology (BS or BA) may pursue Honors in Geology. Students are required to have a minimum GPA of 3.2 after 45 credit hours of coursework and approval of Geology and Geography faculty to commence the Honors program.

To graduate with Honors in Geology, a student must:

- Be admitted to the University Honors Program;
- Complete Senior Thesis Research II (GEOL 4831) with a grade of “B” or higher;
- Complete Introduction to Research (GEOL 4120) with a grade of B or higher, Senior Thesis Research I (GEOL 4830), and Senior Thesis Research II (GEOL 4831) for a total of 8 credit hours;
- Successfully complete and present an Honors Thesis or Capstone Project;
- Be in good standing in the University Honors Program at the time of graduation.

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**Foreign Language (2001 Level)**

Completion through 2001-level Foreign Language | 3

<table>
<thead>
<tr>
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<td>Electives</td>
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