GEOLOGY: GEOPHYSICS, BS

for the degree of Bachelor of Science Major in Geology, Geophysics
Concentration (Specialized Curriculum)

department website: https://www.geology.illinois.edu/
undergraduate (https://www.geology.illinois.edu/undergraduate/)
department faculty: Geology Faculty (https://
www.geology.illinois.edu/people/)
advising: Geology advising (https://www.geology.illinois.edu/cms/
One.aspx?portalId=127672&pageId=258530)
overview of college admissions & requirements: Liberal Arts &
Sciences (http://catalog.illinois.edu/schools/las/academic-units/)
college website: https://las.illinois.edu/
email: geology@illinois.edu

The Specialized Curriculum in Geology (BS) is designed for students
who plan to pursue graduate study in geology or geophysics or who
wish to work professionally in the environmental field upon obtaining
the bachelor's degree. It consists of geology, geophysics, and environmental
gerelated science areas, and offers more training in geology and related science
than is required of students who make geology their major in the
Sciences and Letters Curriculum. Students must choose one of the
following: Geology, Geophysics, or Environmental Geology.

Undergraduate Degree Programs in Geology

For the Degree of Bachelor of Science in Liberal Arts and Sciences
Students select one of the following in consultation with an adviser:

• Major in Geology (Sciences and Letters) (http://catalog.illinois.edu/
dergraduate/las/geology-bslas/)
• Major in Geology (Sciences and Letters), Earth and Environmental
Sciences Concentration (http://catalog.illinois.edu/undergraduate/
las/geology-bslas/earth-environmental-sciences/)
• Major in Geology (Sciences and Letters), Earth Science Teaching
Concentration (http://catalog.illinois.edu/undergraduate/las/geology-
bslas/earth-science-teaching/)

For the Degree of Bachelor of Science in Geology
Students select one of the following in consultation with an adviser:

• Major in Geology (Specialized Curriculum) (http://catalog.illinois.edu/
dergraduate/las/geology-bs/)
• Major in Geology (Specialized Curriculum), Environmental Geology
Concentration (http://catalog.illinois.edu/undergraduate/las/geology-
bs/environmental-geology/)
• Major in Geology (Specialized Curriculum), Geophysics Concentration
  (p. 1)

for the degree of Bachelor of Science Major in Geology, Geophysics
Concentration

Graduation requires a grade point average of at least 2.0 overall and a 2.0
average in all required science and technical courses (geology, physics,
mathematics, chemistry, and technical requirements listed below). The
Department of Geology will supply upon request a Guide for Geology
Undergraduates giving more information about the curriculum.

Departmental Distinction: Students majoring in Geology can earn
distinction, high distinction, and highest distinction upon graduation. The
requirements for these awards are:

Distinction: A minimum cumulative grade point average of 3.3, and have
also completed an approved independent study project, approved senior
thesis, or approved capstone

High Distinction: A minimum cumulative grade point average of 3.5, and
have also completed an approved independent study project, approved
senior thesis, or approved capstone

Highest Distinction: A minimum cumulative grade point average of 3.7,
and also completed an approved senior thesis or approved research
 capstone

General education: Students must complete the Campus General
Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/)
requirements including the campus general education language
requirement.

Minimum hours required for graduation: 126 hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CHEM 102</td>
<td>General Chemistry I</td>
<td>8-9</td>
</tr>
<tr>
<td>CHEM 103</td>
<td>General Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 104</td>
<td>General Chemistry II</td>
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</tr>
<tr>
<td>CHEM 105</td>
<td>General Chemistry Lab II</td>
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<td>or</td>
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<tr>
<td>CHEM 202</td>
<td>Accelerated Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 203</td>
<td>Accelerated Chemistry Lab I</td>
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<tr>
<td>CHEM 204</td>
<td>Accelerated Chemistry II</td>
<td></td>
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<tr>
<td>CHEM 205</td>
<td>Accelerated Chemistry Lab II</td>
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22 hours of Geology Courses

| GEOL 107 | Physical Geology 1                        | 4     |
| GEOL 208 | History of the Earth System               | 4     |
| GEOL 452 | Introduction to Geophysics               | 4     |

10 additional hours of 300 or 400 level geology courses

<table>
<thead>
<tr>
<th>Mathematics</th>
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<tbody>
<tr>
<td>MATH 220</td>
<td>Calculus</td>
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<tr>
<td>or MATH 221</td>
<td>Calculus I</td>
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<tr>
<td>MATH 231</td>
<td>Calculus II</td>
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<tr>
<td>MATH 241</td>
<td>Calculus III</td>
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<tr>
<td>MATH 225</td>
<td>Introductory Matrix Theory</td>
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<tr>
<td>or MATH 41</td>
<td>Applied Linear Algebra</td>
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<tr>
<td>MATH 285</td>
<td>Intro Differential Equations</td>
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<thead>
<tr>
<th>Physics</th>
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<tbody>
<tr>
<td>PHYS 211</td>
<td>University Physics: Mechanics</td>
</tr>
<tr>
<td>PHYS 212</td>
<td>University Physics: Elec &amp; Mag</td>
</tr>
<tr>
<td>PHYS 213</td>
<td>Univ Physics: Thermal Physics</td>
</tr>
<tr>
<td>PHYS 214</td>
<td>Univ Physics: Quantum Physics</td>
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Select one of the following:

| PHYS 325   | Classical Mechanics I                    |
| or         |                                             |
| TAM 210    | Introduction to Statics                   |
| & TAM 212  | and Introductory Dynamics                |

Additional Technical Requirements

Information listed in this catalog is current as of 11/2021
CS 101     Intro Computing: Engr & Sci
or CS 125   Introduction to Computer Science

MSE 401     Thermodynamics of Materials
or PHYS 427 Thermal & Statistical Physics
or CHEM 444 Physical Chemistry II

Six hours of other 300- or 400-level science, math, or engineering courses selected with adviser approval.

1 Students who decide to follow the curriculum after first taking GEOL 100 or GEOL 103 should enroll in GEOL 208. GEOL 100 or GEOL 103 will be accepted as a substitute for GEOL 107, but students should be aware that these courses are not intended for science majors.