

GEOLOGY: GEOPHYSICS, BS

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

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 geology 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/undergraduate/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/undergraduate/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)

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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.

Code	Title	Hours
Chemistry: Select one group of courses:		8-9
CHEM 102	General Chemistry I	
CHEM 103	General Chemistry Lab I	
CHEM 104	General Chemistry II	
CHEM 105	General Chemistry Lab II	
or		
CHEM 202	Accelerated Chemistry I	
CHEM 203	Accelerated Chemistry Lab I	
CHEM 204	Accelerated Chemistry II	
CHEM 205	Accelerated Chemistry Lab II	

22 hours of Geology Courses

GEOL 107	Physical Geology (Students who decide to follow the curriculum after first taking GEOL 100 should enroll in GEOL 208. GEOL 100 will be accepted as a substitute for GEOL 107, but students should be aware that these courses are not intended for science majors.)	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		10

Mathematics		16-18
MATH 220	Calculus	
or MATH 221		
MATH 231	Calculus II	
MATH 241	Calculus III	
MATH 225	Introductory Matrix Theory	
or MATH 415		
MATH 285	Intro Differential Equations	

Physics		15-17
PHYS 211	University Physics: Mechanics	
PHYS 212	University Physics: Elec & Mag	
PHYS 213	Univ Physics: Thermal Physics	
PHYS 214	Univ Physics: Quantum Physics	
Select one of the following:		
PHYS 325	Classical Mechanics I	
or		
TAM 210 & TAM 212	Introduction to Statics and Introductory Dynamics	

Additional Technical Requirements		13
CS 101	Intro Computing: Engrg & Sci	
or CS 125		
MSE 401	Thermodynamics of Materials	
or PHYS 427		
or CHEM 444		
	Physical Chemistry II	

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

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Sample Sequence

This sample sequence is intended to be used only as a guide for degree completion. All students should work individually with their academic advisors to decide the actual course selection and sequence that works best for them based on their academic preparation and goals. Enrichment programming such as study abroad, minors, internships, and so on may impact the structure of this four-year plan. Course availability is not guaranteed during the semester indicated in the sample sequence.

Students must fulfill their Language Other Than English requirement by successfully completing a third level of a language other than English. See the corresponding section on the Degree and General Education Requirements page (<http://catalog.illinois.edu/general-information/degree-general-education-requirements/>).

First Year

First Semester	Hours	Second Semester	Hours
Free elective course		1 GEOL 208	4
CHEM 102 (or CHEM 202)		3 CHEM 104 (or CHEM 204)	4
CHEM 103 (or CHEM 203)		2 CHEM 105 (or CHEM 205)	1
Composition I or General Education course		3 General Education course or Composition I	3
GEOL 107		4 Language Other Than English (3rd level)	4
Free elective course	3		
	16		16

Second Year

First Semester	Hours	Second Semester	Hours
MATH 220 (or MATH 221)		5 MATH 231	3
General Education Course		3 CS 101 (or CS 125)	4
General Education Course		3 PHYS 211	4
Free elective course		3 General Education Course	3
Free elective course		3 Free elective course	2
	17		16

Third Year

First Semester	Hours	Second Semester	Hours
Geology 300-400 level course		3 GEOL 452	4
MATH 241		4 MATH 225 (or MATH 415)	3
PHYS 212		4 PHYS 213	2

300 - 400 - level Science, Math, or Engineering courses	3 PHYS 214	2
General Education Course	3 General Education Course	3
	17	14

Fourth Year

First Semester	Hours	Second Semester	Hours
MSE 401 (or PHYS 427 or CHEM 444)		3 300 - 400 - level Science, Math, or Engineering courses	3
Geology 300-400 level course		4 Geology 300-400 level course	3
PHYS 325 (or TAM 210)		2 TAM 212 (or free elective course)	3
MATH 285		3 General Education Course	3
General Education Course		3 Free elective course	3
	15	15	

Total Hours 126

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Geology

Geology website (<https://www.geology.illinois.edu/undergraduate/>)
 Geology email (<http://catalog.illinois.edu/undergraduate/las/geology-bs/geophysics/geology@illinois.edu>)
 Geology faculty (<https://www.geology.illinois.edu/cms/One.aspx?portalId=127672&pageId=225782>)

College of Liberal Arts & Sciences

LAS College website (<https://las.illinois.edu/>)

Advising

Geology advising (<https://www.geology.illinois.edu/cms/One.aspx?portalId=127672&pageId=258530>)

Admissions

Liberal Arts & Sciences Admissions & Requirements (<http://catalog.illinois.edu/schools/las/academic-units/>)
 University of Illinois Undergrad Admissions (<https://www.admissions.illinois.edu/>)