Hours

# **GEOLOGY, BSLAS**

for the degree of Bachelor of Science in Liberal Arts & Sciences Major in Geology (Sciences & Letters)

The Sciences and Letters Curriculum in Geology (BSLAS), administered by the Department of Geology, is designed for students who want a more flexible course of study than is provided by the Specialized Curriculum in Geology and Geophysics. It may be used by those wishing to obtain a more liberal education and/or background in geology for use in fields such as anthropology, business, mineral economics, regional planning, journalism, law, sales, or library and information science. It is not intended to prepare a student for graduate work in the geological sciences unless the student selects additional courses in mathematics, chemistry, and physics comparable to those required in the Specialized Geology and Geophysics Curriculum. Students must choose from the following: Geology, Earth and Environmental Sciences, or Earth Science Teaching. The Earth Science Teaching Concentration is designed for students preparing to teach earth science at the secondary school level.

# **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 advisor:

- · Major in Geology (Sciences and Letters) (p. 1)
- 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 advisor.

- 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 (http://catalog.illinois.edu/undergraduate/las/geology-bs/ geophysics/)

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**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 required major and supporting course work: Minimum required course work normally equates to 47-52 hours including at least 26 hours in Geology. Twelve hours of 300- and 400-level in the major must be taken on this campus.

Minimum hours required for graduation: 120 hours.

Title

Code

Core requirements:		
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
CHEM 102	General Chemistry I	3
CHEM 103	General Chemistry Lab I	1
	owing MATH courses: (An introductory I., STAT 100, SOC 280, ECON 202, or a second is is recommended)	4-5
MATH 220	Calculus	
or MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Additional requireme	nts beyond the core requirements:	
CHEM 104	General Chemistry II	3
CHEM 105	General Chemistry Lab II	1
PHYS 101	College Physics: Mech & Heat	4-5
or PHYS 211	University Physics: Mechanics	
GEOL 411	Structural Geol and Tectonics	4
GEOL 417	Geol Field Methods, Western US (GEOL 417 is a summer field course taught off campus.)	6
GEOL 432	Mineralogy and Mineral Optics	4
GEOL 436	Petrology and Petrography	4
GEOL 440	Sedimentology and Stratigraphy	4
Three to four hours of elective	of advanced Geology or cognate science	3-4

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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 fourth 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/).

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First Year			
First Semester	Hours	Second Semester Hour	'S
Free elective	1	GEOL 208	4
course			
GEOL 107	2	General	3
		Education course	
		or Composition 1	
Language Other	2	Language Other	4
than English (3rd		than English (4th	
level)		level)	
Composition I or General	2	CHEM 104	3
Education course			
CHEM 102		CHEM 105	1
CHEM 103	1		'
CHEW 103			1.5
0	17		15
Second Year			
First Semester	Hours	Second Semester Hour	-
GEOL 432		GEOL 440	4
GEOL 411		GEOL 436	4
General		MATH 220 (or	4
Education Course		MATH 221 or	
For all all a		MATH 234)	0
Free elective	3	Free elective	3
course		course	
course	1/	course	15
	14		15
Third Year		ļ	
Third Year First Semester	Hours	Second Semester Hour	rs
Third Year	Hours	Second Semester Hour	
Third Year First Semester GEOL 417	Hours 6	Second Semester Hour General Education Course	r <b>s</b> 3
Third Year First Semester GEOL 417 PHYS 211 (or	Hours 6	Second Semester Hour	rs
Third Year First Semester GEOL 417 PHYS 211 (or PHYS 101)	Hours 6	Second Semester Hour General Education Course General Education Course	3 3
Third Year First Semester GEOL 417 PHYS 211 (or	Hours 6	Second Semester Hour General Education Course General	r <b>s</b> 3
Third Year First Semester GEOL 417 PHYS 211 (or PHYS 101) Free elective	Hours 6	Second Semester Hour General Education Course General Education Course	3 3
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Third Year First Semester GEOL 417 PHYS 211 (or PHYS 101) Free elective	Hours 6	Second Semester Hour General Education Course General Education Course Free elective course Free elective course Free elective course	3 3 3 3
Third Year First Semester GEOL 417  PHYS 211 (or PHYS 101) Free elective course	Hours 6	Second Semester Hour General Education Course General Education Course Free elective course Free elective course Free elective course	3 3 3 3
Third Year First Semester GEOL 417  PHYS 211 (or PHYS 101) Free elective course	Hours 6	Second Semester Hour General Education Course General Education Course Free elective course Free elective course Free elective course	3 3 3 3
Third Year First Semester GEOL 417  PHYS 211 (or PHYS 101) Free elective course  Fourth Year First Semester	Hours 6	Second Semester Hour General Education Course General Education Course Free elective course Free elective course Free elective course Second Semester Hour	3 3 3 3 15
Third Year First Semester GEOL 417  PHYS 211 (or PHYS 101) Free elective course  Fourth Year First Semester Advanced Geology course General	Hours  E  Hours  14  Hours	Second Semester Hour General Education Course General Education Course Free elective course Free elective course Free elective course  Second Semester Hour General Education Course	3 3 3 3 15
Third Year First Semester GEOL 417  PHYS 211 (or PHYS 101) Free elective course  Fourth Year First Semester Advanced Geology course	Hours  14  Hours	Second Semester Hours General Education Course General Education Course Free elective course Free elective course Free elective course  Second Semester Hours General Education Course General Education Course	3 3 3 3 15
Third Year First Semester GEOL 417  PHYS 211 (or PHYS 101) Free elective course  Fourth Year First Semester Advanced Geology course General Education Course General	Hours  14  Hours  3	Second Semester Hour General Education Course General Education Course Free elective course Free elective course Free elective course  Second Semester Hour General Education Course General Education Course Free elective	3 3 3 3 15
Third Year First Semester GEOL 417  PHYS 211 (or PHYS 101) Free elective course  Fourth Year First Semester Advanced Geology course General Education Course General Education Course	Hours  14  Hours  3	Second Semester Hour General Education Course General Education Course Free elective course Free elective course Free elective course  Second Semester Hour General Education Course General Education Course Free elective course	3 3 3 3 3 3 3 3 3 3 3 3
Third Year First Semester GEOL 417  PHYS 211 (or PHYS 101) Free elective course  Fourth Year First Semester Advanced Geology course General Education Course General	Hours  14  Hours  3	Second Semester Hour General Education Course General Education Course Free elective course Free elective course Free elective course  Second Semester Hour General Education Course General Education Course Free elective	3 3 3 3 15

	15	
course	course	
Free elective	3 Free elective	3

### **Total Hours 120**

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- Students will develop cross-disciplinary skills of observation, data collection, and spatial display of data (e.g., map making) related to geological materials, features, and processes.
- Students will develop an understanding of the physical, chemical and mathematical theories fundamental to earth processes through rigorous coursework and research.
- Students will develop and apply critical thinking skills to synthesize
  principles learned in the classroom, and data collected in the
  laboratory and in the field in order to evaluate hypotheses and solve
  geological problems.
- Students will demonstrate the ability to communicate effectively scientific data, interpretations, and hypotheses through written and oral methods.
- Students will hone and apply interpersonal skills in a professional setting through group work, research activities, and field studies.

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#### Geology

Geology website (https://www.geology.illinois.edu/undergraduate/) Geology email (geology@illinois.edu) Geology faculty (https://esec.illinois.edu/directory/faculty/)

### College of Liberal Arts & Sciences

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

## Advising

Geology advising (https://esec.illinois.edu/academics/undergraduate-programs/undergraduate-advising/)

#### Admissions

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