

## BS in Geology

The BS degree program, providing comprehensive training in geology and allied natural sciences, prepares graduates for professional work in industry or government, as well as for graduate study in any field of geoscience or environmental sciences. This program prepares students for the examination for the professional geologist license. Students who expect to earn the BS in geology within a minimum amount of time (four years as a full-time student) should have completed geometry, trigonometry, two years of algebra, and chemistry in high school.

### Program Requirements

A minimum total of 120 credit hours is required for the BS in geology. In addition to meeting the requirements of the WSU General Education Program (<http://catalog.wichita.edu/undergraduate/academic-information/general-education-program/>) and the requirements of Fairmount College of Liberal Arts and Sciences, students must meet the following requirements.

A major with the BS requires a minimum of 43 credit hours in geology, including:

Course	Title	Hours
<b>General Education</b>		
Select courses to meet General Education requirements <sup>1</sup>		34-35
<b>College Requirements</b>		
LAS Competencies and Electives - select enough courses to reach 120 credit hours and complete all LAS Competency Areas <sup>1</sup>		9-10
<b>Required Core Courses</b>		
GEOL 111	General Geology	4
GEOL 312	Historical Geology	4
GEOL 320	Mineralogy and Optical Mineralogy	4
GEOL 324	Petrology and Petrography	3
GEOL 522	Sedimentology and Stratigraphy	4
GEOL 540	Field Map Methods	3
GEOL 544	Structural Geology	3
GEOL 570	Biogeology	3
<b>Required Capstone Course</b>		
GEOL 640	Field Geology	6
<b>Additional Courses</b>		
Select an additional 9 credit hours of upper-division geology electives chosen to match the student's career interest and in consultation with an advisor from the geology department. An additional elective capstone course is:		9
GEOL 650	Geohydrology	
<b>Required Supporting Sciences <sup>2</sup></b>		
MATH 242 & MATH 243	Calculus I and Calculus II	10
STAT 370	Elementary Statistics	3
CHEM 211 & CHEM 212	General Chemistry I and General Chemistry II	10
Select one of the following combinations		10
PHYS 213 & PHYS 214	General College Physics I and General College Physics II	
PHYS 313 & PHYS 315 & PHYS 314 & PHYS 316	Physics for Scientists I and University Physics Lab I and Physics for Scientists II and University Physics Lab II <sup>3</sup>	
<b>Total Credit Hours</b>		<b>120</b>

- <sup>1</sup> Required major courses may also count towards General Education and/or LAS Competencies. Students will need to select additional electives to reach 120 credit hours required for graduation with assistance from an advisor.
- <sup>2</sup> It is recommended that the required supporting sciences courses be taken prior to, or at least concurrently with, the required core courses in geology listed above.
- <sup>3</sup> PHYS 313 requires PHYS 315 as corequisite. PHYS 314 requires PHYS 316 as corequisite.

Students interested in pursuing graduate degrees in environmental sciences should also consider taking BIOL 210 and BIOL 418.

### Applied Learning

Students in the BS in geology program are required to complete an applied learning or research experience to graduate from this program. The requirement can be met by taking GEOL 640. Successful completion of this course will serve as fulfillment of the university's applied learning/research experience requirement.