

Geological Sciences Major, B.S.

Department of Geological Sciences

The B.S. degree in Geological Sciences is designed for students interested in a career in geoscience. The study of geology requires a broad base of knowledge in related sciences (chemistry and physics) and mathematics. In addition, the program includes a solid core of geology courses, including a course in field mapping.

Typical Program of Study:

Fall Semester

First Year

Geol 1110 Introductory Geology	4 cr
Chem 1151 General Chemistry I or Chem 1161 Honors Chemistry I	5 cr
Math 1290 Calculus for the Natural Sciences ^a or Math 1296 Calculus I ^a	<u>5 cr</u> 14 cr

Second Year

Phys 2011 General Physics I	4 cr
Geol 2120 Earth's Dynamic Interior	3 cr
Geol 2311 Mineralogy	4 cr
Liberal education or minor field course	<u>3 cr</u> 14 cr

Third Year

Geol 3420 Sedimentology and Stratigraphy	4 cr
Geol 3520 Structural Geology	4 cr
Geology upper division elective ^b	3 cr
Comp 3150 Advanced Writing: Science	<u>3 cr</u> 14 cr

Summer

Geol 4500 Field Geology	6 cr
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Fourth Year

Geology upper division electives ^b	6 cr
Liberal education or minor field courses	<u>8-9 cr</u> 14-15 cr

Spring Semester

Comp 1120 College Writing	3 cr
Chem 1152 General Chemistry II or Chem 1162 Honors Chemistry II	5 cr
Math 1297 Calculus II	5 cr
Geol 2110 Earth History	<u>4 cr</u> 17 cr

Phys 2012 General Physics II	4 cr
Geol 2312 Petrology	4 cr
Liberal education or minor field courses	<u>6 cr</u> 14 cr

Geology upper division elective ^b	3 cr
Liberal education or minor field courses	<u>12 cr</u> 15 cr

Geology upper division elective ^b	3 cr
Liberal education or minor field courses	<u>9 cr</u> 12 cr

^aFirst math course is determined by math placement exam. This schedule presupposes placement into Math 1290 or 1296.

^b15 credits (3xxx and above) are required from the yearly geology offerings including Lim 5001 and Lim 5002 (with the exception of Geol 4110 Advanced Earth Science for Teachers.) Geol 4563 and 4564 (5 credits total) may be substituted for 3 credits of geological sciences electives.

For further information:

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2003-2005 Catalog

Major Course Requirements	Credits	Prerequisites	Semester To Be Completed	Grade When Completed
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Year 1				
Geol 1110 Introductory Geology	4			
Geol 2110 Earth History	4	Geol 1110		
Chem 1151 General Chemistry I	5	1 year high school chemistry and algebra Chem 1151		
Chem 1152 General Chemistry II	5			
OR				
Chem 1161 Honors General Chemistry I	5	High school chemistry; placement Chem 1162		
Chem 1162 Honors General Chemistry II	5			
Math 1290 Calculus for Natural Sciences	5	Math placement exam		
OR Math 1296 Calculus I	5	Math placement exam		
Math 1297 Calculus II	5	Math 1296		
Comp 1120 College Writing	3			

Year 2				
Geol 2120 Earth's Dynamic Interior	3	Geol 1110 or 2110		
Geol 2311 Mineralogy	4	Geol 1110; Chem 1151		
Geol 2312 Petrology	4	Geol 2311		
Phys 2011 General Physics I	4	Math 1290 or Math 1296		
Phys 2012 General Physics II	4	Phys 2011; Math 1297		

Year 3				
Geol 3420 Sedimentology and Stratigraphy	4	Geol 2311 and 2312		
Geol 3520 Structural Geology	4	Geol 2312		
Geology upper division elective*	3			
Geology upper division elective*	3			
Comp 3150 Advanced Writing	3	Comp 1120; 60 credits		

Year 4				
Geology upper division elective*	3			
Geology upper division elective*	3			
Geology upper division elective*	3			

Summer Session after Year 3 or Year 4				
Geol 4500 Field Geology	6	Geol 3520		

*15 credits (3xxx and above) are required from the yearly geology offerings, Lim 5001, and Lim 5002 (with the exception of Geol 4110 Advanced Earth Science for Teachers). Geog 4563 and 4564 (5 credits total) may be substituted for 3 credits of geological sciences electives.

NOTE: In addition to the above, students must complete the liberal education program and a minor to earn the B.S. degree.