

BS Geology Requirements

Class	Prerequisites	Credits
Required Geology Courses		
GEOL 111/111L Physical Geology & Lab		4
GEOL 112 Historical Geology	GEOL 111/111L	4
GEOL 140 Intro to GPS		1
GEOL 301 (was 497R) Career Development	GEOL 112	1
GEOL 316 Writing in the Geosciences	GEOL 352	3
GEOL 340 Intro to GIS for Geoscientists	GEOL 111/111L; and FDMAT 110, Math 109, or FDMAT 112	3
GEOL 351 Earth Materials	GEOL 111/111L	3
GEOL 352 Petrology	CHEM 105 and GEOL 351	3
GEOL 370 Stratigraphy & Sedimentation	GEOL 111/111L and GEOL 112 (Will not be taught fall '16)	4
GEOL 391/392 Structural Geology	GEOL 112 and GEOL 352	2/2
GEOL 409 Field Methods **	GEOL 316, GEOL 352, GEOL 370 and GEOL 392	2
GEOL 410 Advanced Field Methods **	GEOL 409	4
Other Required Courses		
PH 121 and 150 take these together	FDMAT 112 (can take concurrently)	4
PH 123 Principles of Physics 2	PH 121; Math 215 (can take concurrently)	3
CHEM 105 General Chemistry 1	MATH 109 or FDMAT 112	4
CHEM 106 General Chemistry 2	CHEM 105, FDMAT 112	4
FDMAT 112 Calculus 1	MATH 109 or competency	4
MATH 215 Multivariable Calculus	FDMAT 112	4
Geology Electives (See Areas of Emphasis for other options on back)		
GEOL 335 Oceanography and Meteorology (even years)	GEOL 112 and FDMAT 108	4
GEOL 404 Environmental Geology	GEOL 111/111L; and FDMAT 110, MATH 109, or FDMAT 112	3
GEOL 411 Geomorphology	GEOL 111/111L; and FDMAT 110, MATH 109, or FDMAT 112	3
GEOL 412 Geology of North America	GEOL 316, GEOL 352, GEOL 370 and GEOL 392 (Can take 370, 392 concurrently)	3
GEOL 420 Geochemistry	GEOL 352 and CHEM 106	3
GEOL 425 Petroleum Geology	GEOL 370	3
GEOL 435 Hydrology	GEOL 111/111L; and FDMAT 110, MATH 109, or FDMAT 112	3
GEOL 440 Applied GIS	GEOL 340	3
GEOL 445 Applied Geophysics	GEOL 370 and PH 123 (can take concurrently)	3
GEOL 480 Paleontology	GEOL 112 or BIO 180	3
GEOL 490R Geology Research	GEOL 352	1-3
GEOL 498R Geology Internship	GEOL 352	1-3

**GEOL 409 is 4 weeks. It is typically taught the last half of 1st block and the first week of 2nd block. GEOL 410 is taught the 2 weeks after GEOL 409 ends.

Complete Option C for Foundations of Science; Complete all other Foundations Requirements.

This degree prepares students for graduate school in geology or for employment as an entry level geologic technician. This is the most common major in the department. Geology majors take fundamental geology classes as well as core courses in physics, chemistry, and mathematics. Geologists are employed by resource development industries such as petroleum and mining, by federal and state government agencies, and by water and environmental consulting firms. Most students complete their Bachelor's degree with an eye toward graduate school; a Master's degree is the most marketable and financially rewarding degree in geology. Admission to graduate school is dependent on GPA and GRE scores. Top students from BYU-Idaho have been accepted to excellent graduate programs across the nation.

BS in Geology (740)

Take Required Foundations courses (40 credits)

Major Requirements

No Double Counting of Major Courses -- Students must maintain a minimum grade of C- in their major courses

	<i>Choose an emphasis from the following list. Ensure that your grad plan includes 30 total credits of 300- and 400-level courses</i>			
Introductory Geology Core <i>Take these courses during your first 2 semesters</i>	Geoscience	Petroleum	Engineering	Mining
Geol 111 3	<i>For students who plan to go to graduate school and pursue any geoscience career</i>	<i>For students who plan to go to graduate school and pursue a career in petroleum.</i>	<i>For students who plan to work as a geotech in the geological engineering industry.</i>	<i>For students who plan to work in the mining industry.</i>
Geol 111L 1				
Geol 140 1	<i>Choose 10 credits:</i>	<i>Choose 10 credits</i>	<i>Choose 10 credits</i>	<i>Choose 10 credits</i>
Geol 112 4	Geol 404 3	Geol 335 4	Const 350 3	Geol 404 3
Geol 340 3	Geol 411 3	Geol 425 3	Geol 445 3	Geol 420 3
	Geol 412 3	Geol 435 3	ME 142 3	Geol 435 3
	Geol 420 3	Geol 445 3	ME 201 2	Geol 440 3
Geology Core Module	Geol 425 3	B 380 3	ME 202 3	ME 142 3
<i>Take these courses:</i>	Geol 435 3	Geol 412 3	Math 330 3	ME 201 2
Geol 301 1	Geol 440 3	Geol 480 3	Math 316 4	B 380 3
Geol 316 3	Geol 445 3	Geol 490R or Geol 498R 1	Geol 490R or Geol 498R 1	Geol 490R or 498R 1
Geol 351 3	Geol 480 3	Math 330 3	<i>Take the following capstone courses:</i>	<i>Take the following capstone courses:</i>
Geol 352 3	Geol 335 4	<i>Take the following capstone courses:</i>	Geol 409 and 410 6	Geol 409 and 410 6
Geol 370 4	Math 330 3	Geol 409 and 410 6		
Geol 391 2	Geol 490 or Geol 498 1		<u>16</u>	<u>16</u>
Geol 392 2	<i>Take the following capstone courses:</i>			
	Geol 409 and 410 6	Environmental	Geoscience Computing	Hydrology
Physical Science and Math Requirements		<i>For students who plan a career in the environmental field.</i>	<i>For students who plan to work as a geo-computer technician in a geo-industry</i>	<i>For students who plan to pursue a career in hydrology.</i>
<i>Take these courses during your sophomore or junior year:</i>	<u>16</u>	<i>Choose 13 credits</i>	<i>Choose 13 credits</i>	<i>Choose 13 credits</i>
Chem 105 4	GIS (Geographic Information Systems) <i>For students who plan to work as a GIS specialist in a geo-industry.</i>	Biol 250 4	CS 124 3	CIT 124 3
Chem 106 4		Biol 423 3	CS 165 3	Geol 420 3
FdMat 112* 4	<i>Choose 13 credits</i>	Geol 335 4	CIT 225 3	Geol 435 3
Math 215 4	CS 124 or CIT 160 3	Geol 404 3	Math 330 or Math 316 3 or 4	Geol 440 3
PH 121 3	CIT 225 3	Geol 420 3	Geol 425 3	Math 316 4
PH 123 3	Geog 240 3	Geol 435 3	Geol 440 3	Math 330 3
PH 150 1	Geol 440 3	Geol 440 3	Geol 490R or Geol 498R 1	ME 142 3
	Geol 404, Geol 435 or Geol 425 3	Geol 490 or Geol 498 1	<i>Take the following capstone course:</i>	ME 360 3
	Geol 490R or Geol 498R 1	Math 330 3	Geol 409 3	Geol 490R or Geol 498R 1
	Math 330 3	<i>Take the following capstone course:</i>	<u>16</u>	<i>Take the following capstone course:</i>
	<i>Take the following capstone course:</i>	Geol 409 3		Geol 409 3
	Geol 409 3			<u>16</u>
	<u>16</u>			
<i>Program Notes: Be sure to meet with your academic advisor early in your education.</i>				
<i>*FDMAT 1112 needs to be taken to satisfy a major requirement as well as partially satisfy the foundations Quantitative Reasoning requirement. Full completion will also require FDMAT 108T.</i>				