

BS in Geology (694022) MAP Sheet

Physical and Mathematical Sciences, Geological Sciences

For students entering the degree program during the 2018-2019 curricular year.

The basic degree in geology prepares graduates for professional employment in industry or government or for advanced studies in geology, business, or law.



University Core and Graduation Requirements				Suggested Sequence of Courses			
University Core Requirements:				FRESHMAN YEAR			
Requirements	#Classes	Hours	Classes	1st Semester		JUNIOR YEAR	
Religion Cornerstones				5th Semester			
Teachings and Doctrine of The Book of Mormon	1	2.0	REL A 275	First-year Writing	3.0	ENGL 316 (FWSpSu)	3.0
Jesus Christ and the Everlasting Gospel	1	2.0	REL A 250	GEOL 111 (FW)	4.0	GEOL 375 (F)	3.0
Foundations of the Restoration	1	2.0	REL C 225	CHEM 105 or CHEM 111	4.0	GEOL 491R (FW)	0.5
The Eternal Family	1	2.0	REL C 200	Religion Cornerstone course	2.0	PHSCS 106	3.0
The Individual and Society				Total Hours	13.0	Civilization 1	3.0
American Heritage	1-2	3-6.0	from approved list	2nd Semester		Religion Cornerstone course	2.0
Global and Cultural Awareness	1	3.0	from approved list	American Heritage	3.0	General elective	0.5
Skills				CHEM 106, 107 (FWSpSu) or CHEM 112	3-4.0	Total Hours	15.0
First Year Writing	1	3.0	from approved list	GEOL 112	4.0	6th Semester	
Advanced Written and Oral Communications	1	3.0	ENGL 316*	Religion Cornerstone course	2.0	GEOL 400-level elective	3.0
Quantitative Reasoning	1	3-4.0	MATH 112* or 113*, or STAT 121*	General Elective	2.0	GEOL 491R (F)	0.5
Languages of Learning (Math or Language)	1	3-4.0	MATH 112* or 113*, or STAT 121*	Total Hours	14-15.0	STAT 121	3.0
Arts, Letters, and Sciences				SOPHOMORE YEAR			
Civilization 1	1	3.0	from approved list	3rd Semester		Civilization 2	3.0
Civilization 2	1	3.0	from approved list	GEOL 210 (F) (Begins meeting before start of Fall semester)	3.0	Religion elective	2.0
Arts	1	3.0	from approved list	GEOL 230 (F)	3.0	General electives	0.5
Letters	1	3.0	from approved list	GEOL 351 (F)	4.0	Total Hours	12.0
Biological Science	1	3-4.0	from approved list	MATH 112	4.0	Spring/Summer	
Physical Science	1	3.0	GEOL 210*	Religion Cornerstone course	2.0	GEOL 420	2.0
Social Science	1	3.0	from approved list	Total Hours	16.0	GEOL 421	2.0
Core Enrichment: Electives				Total Hours			
Religion Electives	3-4	6.0	from approved list	4th Semester		GEOL 422	2.0
Open Electives	Variable	Variable	personal choice	Biological Science	3.0	Total Hours	6.0
*THESE CLASSES CAN FILL BOTH UNIVERSITY CORE AND PROGRAM REQUIREMENTS (9-14 hours overlap)				SENIOR YEAR			
Graduation Requirements:				7th Semester			
Minimum residence hours required		30.0		GEOL 400-level elective	3.0	GEOL 400-level elective	3.0
Minimum hours needed to graduate		120.0		GEOL 370 (W)	3.0	GEOL 491R (FW)	0.5
				MATH 113	4.0	Global & Cultural Awareness	3.0
				PHSCS 105	3.0	Letters	3.0
				Total Hours	16.0	Religion Elective	2.0
				Total Hours			
				8th Semester			
				GEOL 400-level elective			
				GEOL 491R (FW)			
				Social Science			
				Arts			
				Religion Elective			
				Biological Science			
				Total Hours			
				14.5			
				**Note: The sequence of courses suggested may not fit the circumstances of every student. Students should contact their college advisement center for help in outlining an efficient schedule.			
				Note: Students are encouraged to complete an average of 15 credit hours each semester or 30 credit hours each year, which could include spring and/or summer terms. Taking fewer credits substantially increases the cost and the number of semesters to graduate.			

BS in Geology (694022)
2018-2019 Program Requirements (74 - 75 Credit Hours)

No D credit is allowed in major courses.

REQUIREMENT 1 Complete 11 courses	
GEOL 111 - Physical Geology	4.0
GEOL 112 - Historical Geology	4.0
*GEOL 210 - Field Studies	3.0
GEOL 230 - Geological Communications	3.0
GEOL 351 - Mineralogy	4.0
GEOL 352 - Petrology	3.0
GEOL 370 - Sedimentology and Stratigraphy	3.0
GEOL 375 - Structural Geology	3.0
GEOL 420 - Geological Field Methods	2.0
GEOL 421 - Geological Mapping	2.0
GEOL 422 - Geologic Writing	2.0
REQUIREMENT 2 Complete 2.0 hours from the following course(s)	
TAKE 4 TIMES.	
GEOL 491R - Geology Seminar	0.5
<i>You may take this course up to 4 times.</i>	
REQUIREMENT 3 Complete 4 courses	
GEOL 405 - Applied Mathematics in the Geological Sciences	3.0
GEOL 411 - Geomorphology and Remote Sensing	3.0
GEOL 435 - Introduction to Groundwater	3.0
GEOL 440 - Solid Earth Geophysics	3.0
GEOL 445 - Geochemistry	3.0
GEOL 452 - Petrography to Petrogenesis	3.0
GEOL 460 - Economic and Resource Geology	3.0
GEOL 476 - Introduction to Seismic Interpretation	3.0
GEOL 480 - Paleontology	3.0
REQUIREMENT 4 Complete 1 option	
OPTION 4.1 Complete 3 courses	
CHEM 105 - General College Chemistry 1 with Lab (Integrated)	4.0
CHEM 106 - General College Chemistry 2	3.0
CHEM 107 - General College Chemistry Laboratory	1.0
OPTION 4.2 Complete 2 courses	
CHEM 111 - Principles of Chemistry 1	4.0
CHEM 112 - Principles of Chemistry 2	3.0
REQUIREMENT 5 Complete 6 courses	
*ENGL 316 - Technical Communication	3.0
MATH 112 - Calculus 1	4.0
MATH 113 - Calculus 2	4.0
PHSCS 105 - General Physics 1	3.0
PHSCS 106 - General Physics 2	3.0
STAT 121 - Principles of Statistics	3.0

REQUIREMENT 6
 All students are required to construct a portfolio of their work that includes samples of their writing, scientific data analysis, and presentations, both oral and written. The portfolio will be evaluated during the semester before graduation.

THE DISCIPLINE

Geological sciences consist of a number of disciplines aimed at understanding the Earth's origin and development and the natural processes that have operated upon it and within it from the time of formation of the solar system. With the development of remote sensing technology and the exploration of the solar system by spacecraft, geological sciences have become increasingly important for understanding not only the Earth but the Moon, other planets and their moons, and small bodies that orbit the sun.

Understanding the dynamic processes of Earth and other planets is relevant to many societal needs, such as assessment and forecasting of natural hazards, environmental change, and discovery of energy and mineral resources. Some of the diverse disciplines that can be studied in this department include general geology, plate tectonics, volcanology, geochemistry, geophysics, paleontology, environmental geology, petroleum geology, hydrogeology, paleoclimatology, and planetary geology.

CAREER OPPORTUNITIES

Graduates have the opportunity to work both outdoors and in the laboratory, pursuing careers in energy, mineral, and water resources or in environmental evaluation with industry, government, or consulting firms. The substantial preparation in basic sciences and mathematics also leads to a broad spectrum of teaching opportunities. Some scholarship money is available for those who pursue a geological sciences degree as a pre-law track.

The most marketable terminal degree in geological sciences is the MS. Starting salaries for this degree are often very competitive with any other discipline.

MAP DISCLAIMER

While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

DEPARTMENT INFORMATION

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ADVISEMENT CENTER INFORMATION

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