

GEOLOGY (B.S.)

Degree: Bachelor of Science

Major: Geology

Concentration: None

Total Hours: 120

Advisors: Joseph Kruger

Code	Title	Hours
General Education Core Curriculum		
<i>Communication</i>		
ENGL 1301	Composition I	3
COMM 1315	Public Speaking I	3
<i>Mathematics</i>		
MATH 2413	Calculus and Analytical Geometry I	4
<i>Life and Physical Sciences</i>		
GEOL 1403	Geology I: Physical Geology	4
GEOL 1404	Geology II: Historical Geology	4
<i>Language, Philosophy and Culture</i>		
Select one of the following:		3
DSDE 1374	Introduction to Deaf Studies	
ENGL 2300	Close Reading II	
ENGL 2322	British Literature	
ENGL 2326	American Literature	
ENGL 2331	World Literature	
ENGL 2376	African-American Literature	
FREN 2312	Intermediate French II	
PHIL 1370	Philosophy of Knowledge	
PHIL 2306	Ethics	
SPAN 2312	Intermediate Spanish II	
<i>Creative Arts</i>		
Select one of the following:		3
ARTS 1301	Art Appreciation	
ARTS 1303	Art History I	
COMM 1375	Film Appreciation	
COSC 1324	The Art of Computer Game Development	
DANC 2304	Dance Appreciation	
MUSI 1306	Music Appreciation	
MUSI 1309	Jazz History and Appreciation	
MUSI 1310	History of Rock and Roll	
PHIL 1330	Arts and Ideas	
THEA 1310	Theatre Appreciation	
<i>American History</i>		
Select two of the following:		6
HIST 1301	U S History I 1763-1877	
HIST 1302	U S History II Since 1877	
HIST 2301	Texas History	
<i>Government/Political Science</i>		
POLS 2301	Intro to American Government I	3
POLS 2302	Intro/American Government II	3

<i>Social/Behavioral Sciences</i>		
Select one of the following:		3
ANTH 2346	Introduction to Anthropology	
ANTH 2351	Cultural Anthropology	
BULW 1370	Business Environment and Public Policy	
CRIJ 1301	Intro to Criminal Justice	
ECON 1301	Principles and Policies	
ECON 2301	Principles of Economics I Macro	
ECON 2302	Principles of Economics II Micro	
FINC 2310	Intro to Consumer Finance	
INEN 2373	Engineering Economics	
PSYC 2301	General Psychology	
PSYC 2315	Lifespan Development	
POLS 1301	Intro to Political Science	
SOCI 1301	Introduction to Sociology	
SOWK 2361	Intro Social Work	
<i>Component Area Option</i>		
ENGL 1302	Composition II	3
MATH 2414	Calculus and Analytical Geometry II	4
Required Courses for Major		
GEOL 2373	Optical Mineralogy	3
GEOL 2471	Mineralogy Petrology	4
GEOL 2377	Physical Geography and Geomorphology	3
GEOL 3420	Structural Geology	4
GEOL 3450	Petrology	4
GEOL 3600	Summer Field Camp	6
GEOL 4101	Special Topic Earth Science (Geomorphology Lab)	1
GEOL 4101	Special Topic Earth Science (Geophysics Lab)	1
GEOL 4301	Special Topic Earth Science (Geoscience Seminar)	3
GEOL 4330	Geophysics	3
GEOL 4410	Stratigraphy and Sedimentology	4
GEOL 4420	Paleontology	4
<i>Supporting Courses</i>		
CHEM 1311	General Chemistry I	3
CHEM 1111	General Chemistry I Laboratory	1
CHEM 1312	General Chemistry II	3
CHEM 1112	General Chemistry II Laboratory	1
Complete one of the following pairs		8
PHYS 1401 & PHYS 1402	College Physics I and College Physics II	
PHYS 2425 & PHYS 2426	University Physics I and University Physics II	
PSYC 2317	Introduction to Statistical Methods or MATH 1342 Statistics	3
<i>Electives</i>		
3000-4000 level Science, Math or Engineering courses ¹		15
Total Hours		120

¹ A minimum of 9 hours must be GEOL.

Recommended Program of Study

Course	Title	Hours
First Year		
Fall		
GEOL 1403	Geology I: Physical Geology	4
ENGL 1301	Composition I	3
MATH 2413	Calculus and Analytical Geometry I	4
HIST 1301	U S History I 1763-1877	3
Hours		14
Spring		
GEOL 1404	Geology II: Historical Geology	4
CHEM 1311	General Chemistry I	3
CHEM 1111	General Chemistry I Laboratory	1
ENGL 1302	Composition II	3
MATH 2414	Calculus and Analytical Geometry II	4
Hours		15
Second Year		
Fall		
GEOL 2471	Mineralogy Petrology	4
GEOL 2377	Physical Geography and Geomorphology	3
GEOL 4101	Special Topic Earth Science (Geomorphology Lab)	1
CHEM 1312	General Chemistry II	3
CHEM 1112	General Chemistry II Laboratory	1
Language, Philosophy & Culture		3
Hours		15
Spring		
GEOL 2373	Optical Mineralogy	3
HIST 1302	U S History II Since 1877	3
PHYS 1401 or PHYS 2425	College Physics I or University Physics I	4
MATH 1342 or PSYC 2317	Statistics or Introduction to Statistical Methods	3
Hours		13
Third Year		
Fall		
GEOL 3450	Petrology	4
PHYS 1402 or PHYS 2426	College Physics II or University Physics II	4
POLS 2301	Intro to American Government I	3
Creative Arts		3
Hours		14
Spring		
GEOL 3420	Structural Geology	4
GEOL 4410	Stratigraphy and Sedimentology	4
POLS 2302	Intro/American Government II	3
GEOL 4330	Geophysics	3
GEOL 4101	Special Topic Earth Science (Geophysics Lab)	1
Hours		15
Summer		
GEOL 3600	Summer Field Camp	6
Hours		6
Fourth Year		
Fall		
GEOL 4420	Paleontology	4
Elective	3000-4000 course ¹	4
Communication		3
Elective	3000-4000 course ¹	3
Hours		14
Spring		
GEOL 4301	Special Topic Earth Science (Geoscience Seminar)	3
Social and Behavioral Sciences		3

Elective	3000-4000 course ¹	4
Elective	3000-4000 course ¹	4
Hours		14
Total Hours		120

¹ Students should meet with their academic advisor to formulate their own plan.

The State of Texas has legislated that any geologist practicing geology in the public domain affected by engineering and environmental geology policies in the State of Texas must be registered as a Professional Geoscientist (P.G.). Acquiring the P.G. license requires passing two exams: the Fundamentals of Geology (F.G.) and the Professional Geoscientist (P.G.) exams prepared and distributed by the Association of State Boards of Geologists (ASBOG). The license also requires at least five years of experience practicing geology in addition to passing the exams. Students seeking the P.G. are also strongly encouraged to take Hydrogeology, GIS, and Remote Sensing in addition to required geology courses. For more information on P.G. licensing requirements, go to the Texas Board of Professional Geoscientists at <https://tbpge.state.tx.us>.