

BACHELOR OF SCIENCE, MAJOR IN GEOLOGY

Additional information: Reference the Program Landing Page (<https://www.shsu.edu/programs/bachelor-of-science-in-geology/>) for additional information, such as cost, delivery format, contact information, or to schedule a visit.

Code	Title	Hours
Bachelor of Science, Major in Geology		
Core Curriculum		
Component Area I (Communication)		6
Component Area II (Mathematics) ¹		3
Component Area III (Life and Physical Science) ^{2,3}		8
Component Area IV (Language, Philosophy, and Culture)		3
Component Area V (Creative Arts)		3
Component Area VI (U.S. History)		6
Component Area VII (Political Science/Government)		6
Component Area VIII (Social and Behavioral Sciences)		3
Component Area IX (Component Area Option) ¹		4
Degree Specific Requirements		
CHEM 1411 & CHEM 1412	General Chemistry I and General Chemistry II ²	8
MATH 1420 & MATH 1430 or MATH 3379	Calculus I and Calculus II ¹ Statistical Methods in Practice	7-8
PHYS 1301 & PHYS 1101 & PHYS 1302 & PHYS 1102	General Physics-Mechanics and Heat and General Physics Laboratory I and General Physics-Sound, Light, Electricity, and Magnetism and General Physics Laboratory II ³	8
Major: Foundation		
GEOL 1403 or GEOL 1405	Physical Geology Geologic & Environmental Hazards	4
GEOL 1404 & GEOL 3301	Historical Geology and Field Methods	7
GEOL 3404 & GEOL 3405	Mineralogy and Petrology	8
GEOL 4304	Geochemistry	3
GEOL 4400 & GEOL 4402 & GEOL 4360 & GEOL 4361	Stratigraphy & Sedimentation and Structural Geology and Field Geology and Field Geology	14
GEOL 4426 or GEOL 4320	Hydrogeology Petroleum Geology	3-4
Major: Prescribed Electives		
GEOL Advanced Electives		10
Minor: Required ⁴		
Minor (Advanced)		6
Minor		12
Total Hours		120-122

¹ MATH 1420 satisfies the Core Curriculum requirement for Component Area II (Mathematics), one semester credit hour of Component Area IX (Component Area Option), and the Degree Specific requirement.

² CHEM 1411 and CHEM 1412 satisfy the Core Curriculum requirement for Component Area III (Life and Physical Science) and the Degree Specific requirement.

³ PHYS 1411 and PHYS 1422 also satisfy the Core Curriculum requirement for Component Area III (Life and Physical Science) and the Degree Specific requirement.

⁴ All minors can be paired with this degree program.

Notes

Students must earn a 2.0 minimum overall GPA in all coursework.

Students must meet a 2.0 minimum overall major GPA in all major coursework.

Students must earn a 2.0 minimum SHSU GPA in all coursework.

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First Year

Fall	Hours	Spring	Hours	Summer	Hours
CHEM 1411 ¹		4 CHEM 1412 ¹		4 GEOL 3301	3
ENGL 1301 ²		3 ENGL 1302 ²		3	
GEOL 1403 or 1405		4 GEOL 1404		4	
MATH 1420 ³		4 MATH 1430 or 3379		3-4	
		15		14-15	3

Second Year

Fall	Hours	Spring	Hours	Summer	Hours
GEOL 3404		4 GEOL 3405		4	
Minor ⁴		3 Minor ⁴		3	
PHYS 1301 & PHYS 1101 ¹		4 PHYS 1302 & PHYS 1102 ¹		4	
POLS 2305 ⁵		3 POLS 2306 ⁵		3	
		14		14	

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
Component Area IV		3 Component Area V		3	
GEOL 4400		4 GEOL 4402		4	
HIST 1301 ⁶		3 HIST 1302 ⁶		3	
Minor ⁴		3 Minor ⁴		3	
		13		13	

Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
Component Area VIII		3 Component Area IX		3 GEOL 4360 & GEOL 4361	6
GEOL 4304		3 GEOL 4426 or 4320		3-4	
GEOL Advanced Electives		3 GEOL Advanced Electives		4	
GEOL Advanced Electives		3 Minor Advanced ⁴		3	
Minor Advanced ⁴		3			
		15		13-14	6

Total Hours: 120-122

¹ Satisfies Core Curriculum requirement for Component Area III (Life and Physical Science). PHYS 1411 and PHYS 1422 also satisfy this requirement.

² Satisfies Core Curriculum requirement for Component Area I (Communications).

³ MATH 1420 satisfies the Core Curriculum requirement for Component Area II (Mathematics), one semester credit hour of Component Area IX (Component Area Option), and the Degree Specific requirement.

⁴ All minors can be paired with this degree program.

⁵ Satisfies Core Curriculum requirement for Component Area VII (Political Science/Movement).

⁶ Satisfies Core Curriculum requirement for Component Area VI (U.S. History).

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The Texas Higher Education Coordinating Board (THECB) marketable skills initiative is part of the state's **60x30TX plan** and was designed to help students articulate their skills to employers. Marketable skills are those skills valued by employers and/or graduate programs that can be applied in a variety of work or education settings and may include interpersonal, cognitive, and applied skill areas.

The BS in Geology is designed to provide graduates with the following marketable skills:

- Observation, data collection, analysis, and interpretation.
- Prepare, process, and present data.
- Handle information in a range of different mediums, e.g. textual, numerical, oral, graphical.
- Written and verbal communication skills.
- Report writing skills.
- Problem-solving skills and lateral thinking.
- Self-motivation and resilience.
- Team-working skills and the ability to work on your own initiative.