

Geosciences (BAGS)

The Bachelor of Arts in Geosciences is a classical arts and sciences degree that gives students a great deal of flexibility in their choice of upper-division courses. Students must complete courses in the natural sciences, the social and behavioral sciences, and the humanities. This diversity of subjects provides an opportunity to learn about basic differences in outlook among different disciplines, the ways questions are raised and answered, and the ways the answers are validated and made relevant in practical use.

Students who plan to become professional geoscientists should pursue a Bachelor of Science in Geosciences (BSGS) degree. The Geosciences, Teaching (BSGS) concentration is available for students interested in pursuing a career teaching math and science at the middle and secondary school level.

Admissions

Information about admissions to this program is given in the school's [Admissions section](#).

Total Hours Required: 120

Plan of Study

The Plan of Study is a suggested four-year course sequence to support academic planning and serves as a helpful guide. Currently enrolled students should meet with their academic advisor to tailor their course selections and timelines to their individual goals and circumstances.

Course	Title	Hours
Year 1		
Semester 1		
GEO 401	Physical Geology	4
Mathematics (020)		3
CH 301	Principles of Chemistry I	3
First-Year Signature Course (090)		3
Communication (010)		3
Hours		16
Semester 2		
GEO 405	Life through Time	4
BIO course		3
CH 302	Principles of Chemistry II	3
General Culture course		3
Hours		13
Year 2		
Semester 1		
GEO 416E	Solid Earth Processes	4
GEO 416S	Earth and Planetary Processes Through Time	4
BIO course		3
Foreign Language other than English, Beginning Proficiency		6
Hours		17
Semester 2		
GEO 420K	Introduction to Field and Stratigraphic Methods	4
PHY 302K or PHY 303K	General Physics Technical Course: Mechanics, Heat, and Sound or Engineering Physics I	3
U.S. History (060)		3
Foreign Language other than English, Beginning Proficiency		6
Hours		16
Year 3		
Semester 1		
Upper-division GEO course		4
Upper-division Elective		3

<u>Humanities (040)</u>	3
<u>Social and Behavioral Sciences (080)</u>	3
Interdisciplinary Studies course	3
Hours	16
Semester 2	
Upper-division GEO course	3
Upper-division elective	3
<u>American and Texas Government (070)</u>	3
Upper-division Social Science course	3
Interdisciplinary Studies course	3
Hours	15
Year 4	
Semester 1	
Upper-division GEO course	3
Upper-division Interdisciplinary Studies course	3
<u>American and Texas Government (070)</u>	3
Upper-division elective	3
Hours	12
Semester 2	
Upper-division GEO course	3
Upper-division elective	3
<u>U.S. History (060)</u>	3
<u>Visual and Performing Arts (050)</u>	3
Upper-division Interdisciplinary Studies course	3
Hours	15
Total Hours	120

Requirements

All requirements are listed below, starting with the most specialized moving to the most general. Additional requirements may follow the table, so be sure to read the entire page. Some required courses listed below may also satisfy [General Education](#) requirements, including [Core Curriculum](#).

Code	Title	Hours
Major		
Hours chosen from:		3
GEO 401	Physical Geology	
OR		
GEO 303	Introduction to Geology	
GEO 405	Life through Time	4
GEO 416E	Solid Earth Processes	4
GEO 416S	Earth and Planetary Processes Through Time	4
GEO 420K	Introduction to Field and Stratigraphic Methods	4
Hours chosen from: biology		6
CH 301	Principles of Chemistry I	3
CH 302	Principles of Chemistry II	3
Hours chosen from: physics		3
Hours chosen from: additional geological sciences		14
<i>Subtotal</i>		<i>48</i>
Degree		
Foreign Language other than English, Intermediate Proficiency		
Additional social science, chosen from the following fields. (Field must differ from the course used to fulfill core curriculum.):		3
Anthropology		
Economics		
Geography		
Linguistics		
Psychology		
Sociology		

Additional natural sciences chosen from the following fields. (No more than three hours may be in either the history of science or the philosophy of science, and choices must differ from courses taken to fulfill core curriculum.)	6
Astronomy	
Biology	
Chemistry	
Marine science	
Nutrition	
Physical science	
Physics	
Mathematics	
Computer science	
Experimental psychology	
Physical anthropology	
Physical geography	
Philosophy (course in logic)	
History of science and philosophy of science	
Additional General Culture hours chosen from the following fields. (Field must differ from the course taken to fulfill core curriculum.):	3
Architecture	
Classical civilization, Greek, Latin	
Art history, design, ensemble, fine arts, instruments, music, studio art, theatre and dance, visual art studies	
Philosophy (excluding courses in logic)	
<i>Interdisciplinary Studies</i>	
Additional hours chosen from a single interdisciplinary studies fields listed below (may not also be counted toward other requirements)	6
Additional upper-division hours chosen from the interdisciplinary studies fields listed below (may not also be counted toward other requirements)	6
Interdisciplinary studies fields:	
Anthropology	
Astronomy	
Biology	
Business	
Computer science	
Chemistry	
Education	
Engineering	
Geography	
Mathematics	
Physics	
Other disciplines may be chosen with submission and approval of a petition through the JSG Student Services Office.	
Hours chosen from: upper-division coursework	12
<i>Subtotal</i>	36
General Education	
<u>Remaining Core Curriculum (42 hours total)</u>	36
Free electives: Additional coursework to reach total hours required.	
<i>Subtotal</i>	36
<u>College Requirements - Geosciences</u>	
<u>General University Requirements</u>	
Total Hours	120

Additional Requirements and Policy

The coursework counted toward the degree may include no more than 36 hours in any one field of study in the College of Liberal Arts or the College of Natural Sciences; and no more than 36 hours in any other single college or school of the University, including the Jackson School of Geosciences.

At least 18 semester hours of coursework in geological sciences, including six hours of upper-division coursework, must be completed in residence at the University. As long as all residence rules are met, credit may be earned by examination, by extension, by correspondence (up to 30 percent of the semester hours required for the degree).