

Geology, B.A.

Learn more about the Bachelor of Arts in Geology.

The B.A. program is not intended for prospective geologists. The B.A. program is suitable for pre-medicine or pre-law students or for students planning to teach earth science in secondary schools.

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Bachelor of Arts

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)

- Students must complete all University requirements including those listed below.
- All Temple students must take a minimum of two writing-intensive courses at Temple as part of their major. The specific writing-intensive course options for this major are:

Code	Title	Credit Hours
EES 2096	Climate Change: Oceans To Atmosphere	4
EES 2097	Process Geomorphology	4
EES 4696	Vertebrate Paleontology and Taphonomy	3
EES 4796	Soils and Paleosols	4
EES 4896	Planetary Geology	4

- Students must complete the General Education (GenEd) requirements.
 - See the General Education section of the *Undergraduate Bulletin* for the GenEd curriculum.
 - Students who complete CST majors receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements.

2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), or the College of Engineering (ENG).
- 90 credits within the College of Science & Technology (CST), the College of Liberal Arts (CLA), or the College of Engineering (ENG).
- Two (2) Upper-Level (2000+) Liberal Arts courses.
- Second (2nd) Level of a Foreign Language (1002).
- All students in the College of Science and Technology are required to take a one credit first year seminar. SCTC 1001 CST First Year Seminar is the appropriate course option for every entering first year CST major. Transfer students should use SCTC 2001 CST Transfer Seminar to fulfill this requirement. Other courses that fulfill this requirement may be found on the CST College Requirements page.

3. Major Requirements for Bachelor of Arts (51-56 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 4 EES courses must be completed at Temple.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
Select one of the following:		4
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
Physics		
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
Earth & Environmental Science		
EES 2001	Physical Geology	4
EES 2011	Mineralogy I (F)	4
Select one EES course between 3020-3025:		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
Earth & Environmental Science Electives ¹		
Five EES electives 2002 or above		15-20
Science Foundation Electives		
Select two of the following:		8
BIOL 1111 or BIOL 1911	Introduction to Organismal Biology Honors Introduction to Organismal Biology	
BIOL 1112 or BIOL 1912 or BIOL 2112 or BIOL 2912	Introduction to Biomolecules, Cells and Genomes Honors Introduction to Biomolecules, Cells and Genomes Introduction to Cellular and Molecular Biology Honors Introduction to Cellular and Molecular Biology	
CHEM 1032 & CHEM 1034 or CHEM 1952 & CHEM 1954	General Chemistry II and General Chemistry Laboratory II Honors General Chemical Science II and Honors Chemical Science Laboratory II	
CHEM 2201 & CHEM 2203 or CHEM 2921 & CHEM 2923	Organic Chemistry I and Organic Chemistry Laboratory I Organic Chemistry for Honors I and Organic Honors Laboratory I	
PHYS 1062 or PHYS 1962 or PHYS 2022 or PHYS 2922	Elementary Classical Physics II Honors Elementary Classical Physics II General Physics II Honors General Physics II	
Total Credit Hours		51-56

Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		

¹ Earth & Environmental Science electives must be 3 or 4 credit courses above 2001, and at least two of the Earth & Environmental Science electives must be writing-intensive courses. One of the five EES elective courses can be outside of the department with faculty advisor approval.

Calculation of Major GPA

Courses listed under the major requirements for the degree will be included in the calculation of the major GPA. Courses that could not apply toward the major as an elective or required course would not be counted in the calculation of the major GPA. This would include CHEM 1027, for example.

Senior Research Project

Students whose cumulative GPA is at least 3.25 at the end of the first semester of their junior year are eligible to undertake a senior research project. In the second semester of their junior year, students must select a faculty research advisor and, with the advisor, prepare a written research proposal. After the research advisor and the undergraduate Earth & Environmental Science advisor approve the proposal, the student may register for up to four (4) hours of EES 4082 Individual Study Program for a grade. Additional credits may be offered in subsequent semesters, but only for Credit/No-Credit (CR/NC), to carry out the research project. Normally, the project will involve field or laboratory work in the summer between the junior and senior years and lead to presentation of the results at a departmental seminar.

Distinction in Major

To graduate with distinction in the major, students are required to achieve a 3.5 GPA in EES and Upper Level Science Electives for the major. In addition, a student graduating with distinction has no grade below C in the remaining courses required for the major.

Suggested Academic Plan

Bachelor of Arts in Geology

Requirements for New Students starting in the 2022-2023 Academic Year

Year 1		Credit Hours
Fall		
EES 2001	Physical Geology	4
MATH 1041 or 1941	Calculus I	4
SCTC 1001	CST First Year Seminar	1
ENG 0802, 0812, or 0902	Analytical Reading and Writing [GW]	4
Elective		2
Term Credit Hours		15
Spring		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I (F)	
Select one of the following:		4
MATH 1044	Introduction to Probability and Statistics for the Life Sciences	
MATH 1042	Calculus II	
MATH 1942	Honors Calculus II	
IH 0851 or 0951	Intellectual Heritage I: The Good Life [GY]	3
Elective		3
Elective		2
Term Credit Hours		16
Year 2		
Fall		
EES 2011	Mineralogy I (F)	4

Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
IH 0852 or 0952	Intellectual Heritage II: The Common Good [GZ]	3
Elective		4
Term Credit Hours		15
Spring		
Earth & Environmental Science Elective (see Requirements page)		4
GenEd Breadth Course		3
Elective		3
Elective		3
Elective		3
Term Credit Hours		16
Year 3		
Fall		
Select one EES course between 3020-3025:		4
EES 3021	Groundwater Hydrology (S)	
EES 3025	Physical Hydrology (F)	
Science Foundation Elective (see Requirements page)		4
GenEd Breadth Course		3
Elective		3
Elective		1
Term Credit Hours		15
Spring		
Earth & Environmental Science Elective [WI] (see Requirements page)		4
Science Foundation Elective (see Requirements page)		4
GenEd Breadth Course		3-4
Elective		4-3
Term Credit Hours		15
Year 4		
Fall		
Earth & Environmental Science Elective (see Requirements page)		4
GenEd Breadth Course		3
Elective		3
Elective		3
Elective		3
Term Credit Hours		16
Spring		
Earth & Environmental Science Elective [WI] (see Requirements page)		4
Earth & Environmental Science Elective (see Requirements page)		4
GenEd Breadth Course		3
Elective		3
Elective		1
Term Credit Hours		15
Total Credit Hours:		123
Code	Title	Credit Hours
(F) - Fall only course		
(S) - Spring only course		