

ASSOCIATE IN SCIENCE IN GEOLOGY FOR TRANSFER (AS-T)

Students completing the Associate in Science in Geology for Transfer will be able to seamlessly transfer in the CSU system to pursue a baccalaureate degree in Geology. Students completing this degree will have an introductory foundation for the field of Geology through the study of the scientific method, Earth materials, Earth processes, and Earth history. They will acquire skills, knowledge, and abilities that enable students to use a scientific approach incorporating basic chemistry and mathematics to the study of the Earth; identify common minerals, rocks, and geomorphic features of Earth; describe the materials and elucidate the processes that comprise the dynamic Earth system; describe the evidence for and occurrence of major events in Earth History.

Program Outcomes

- Understand that geology involves the application of chemistry, physics, biology and mathematics to the study of geological phenomena.
- Employ the scientific method to understand and explain geologic phenomena.
- Know fundamental scientific explanations for major geological events in earth's past, present and future.

Transfer & Career Opportunities

This Associate in Science in Geology for Transfer (AS-T) Degree is intended to meet the lower division requirements for Geology for all CSU campuses. Students planning to transfer to institutions other than the CSU are encouraged to consult ASSIST.org (<http://ASSIST.org>) and a COS counselor for program planning and course selection. Most common career opportunities with a baccalaureate degree include: entry-level field technician/geologist in industry (mining, oil, environmental consulting) and governmental agencies (Department of Natural Resources, Geological Surveys, National Parks).

Program Requirements

Code	Title	Units
GENERAL EDUCATION		37-39
Select one of the following General Education patterns:		
California State University General Education (CSU-GE) *		
Intersegmental General Education Transfer Curriculum (IGETC-CSU) **		
+		
REQUIRED MAJOR COURSES		26
CHEM 001	General Chemistry 1	5
CHEM 002	General Chemistry 2	5
GEOL 001	Physical Geology *	4
GEOL 005	Earth History	4
MATH 065	Calculus 1 *	4
MATH 066	Calculus 2	4
+		
ELECTIVES		1-4

Select additional transferable courses numbered 1-199 to achieve 60 units. The Science Division recommends at least one of the following courses - which includes a field trip - to meet this elective requirement:

GEOL 151	Geology of the Mojave Desert	1
GEOL 152	Geology of the Central Coast	1
GEOL 153	Granite, Glaciers, and Gold	1
GEOL 154	Volcanoes of Northern California	2
=		
TOTAL		60

* Course(s) meets General Education requirement and 6 units may be double counted above in 1A (CSU GE).

** 7 units may be double counted above in 1B (IGETC-CSU). IGETC-CSU requires completion of IGETC AREA 1C.

The Associate in Science Degree for Transfer requirements include completion of the 60 unit program defined above with at least 12 units taken in residence at College of the Sequoias with a "C" (2.0) average and a "C" or better grade in all required major and unrestricted electives courses (see Transfer Information and Requirements (<https://catalog.cos.edu/transfer-information-requirements/>) section for additional details).

NOTE: Although not required for this Transfer Model Curriculum, Physics is universally required for CSU Geology Programs. Students should consider taking PHYS 020 + PHYS 021 or PHYS 055 + PHYS 056 + PHYS 057 as additional preparation.