



PROGRAM OF STUDY

Geology Associate in Science for Transfer

The Associate in Science in Geology for transfer Degree focuses on an understanding of internal processes responsible for the formation of the Earth from a scientific perspective. Students choosing this degree program will study a range of natural science concepts including plate tectonics, climate change, and the evolution of the dynamic planet Earth. This degree employs the scientific method to understand the formation of the Earth, including how volcanoes and mountain building events change the geography and ecosystems of the Earth. Students will explore geologic time as it relates to the origins, and evolution of life through the fossil record.

An understanding of the formation of economically important mineral and fossil fuel resources is an important aspect of the degree program. Portions of the course work will focus on the diverse California geologic setting and coastal development. Completion of the Associate in Science in Geology for transfer Degree will provide students with a well-rounded understanding of human impacts on the globe and the ways geologic hazards such as earthquakes, floods, and landslides impact human development. After earning the AS in Geology for transfer degree, students will be prepared to continue-on for a baccalaureate degree in Geology.

The coursework prepares students to think critically and apply reasoning skills to analyze real world situations. All students receiving the AS-T degree in geology should be fully prepared for transfer to CSU/UC or other university geology programs armed with the foundation needed to pursue a baccalaureate degree in geology to further prepared for careers as geologists in fields such as research, industry and education. The requirements are almost universal: two semesters of geology courses, two semesters of chemistry and two semesters of calculus. It is strongly recommended that all geology majors take courses in physics and biology in addition to the degree requirements, but this cannot be included as a requirement due to unit limitations.

Program Outcomes:

OUTCOME 1:

Apply the scientific method to solve geological problems.

OUTCOME 2:

Summarize geologic time, explain the geologic time scale and its scientific basis, recount the milestone events in Earth history, and understand the basics of common dating methods.

OUTCOME 3:

Express the role of the geology in everyday life, appreciate the extent of human impact on Earth systems and environments, and understand the processes that create natural hazards, and the strategies that minimize their impact on society.

Courses Needed for Geology (Transfer)

Required Core (26 units):	Units
GEOL A110 Physical Geology	4.0
GEOL A185 Evolution of the Earth	3.0
GEOL A185L Evolution of the Earth Lab	1.0
CHEM A180 General Chemistry A	5.0
CHEM A185 General Chemistry B	5.0
MATH A180 Calculus 1 <u>or</u> MATH A180H Calculus 1 Honors	4.0
MATH A185 Calculus 2 <u>or</u> MATH A185H Calculus 2 Honors	4.0
Subtotal	26.0

Program Major Units: 26	Units
CSU or IGETC General Education Breadth: (Double counting major courses as General Education Breadth for CSU and IGETC lowers total Breadth requirement.)	
Subtotal	34.0

Courses in major program may be double counted in GE Breadth Section	Units
Transfer elective units as needed to satisfy 60-unit degree requirement	
Subtotal	Varies

Total Units 60.0