

# GEOLOGICAL SCIENCES, ASSOCIATE OF SCIENCE (AS)

## Overview

Geologic science is the science of the earth. It is an organized body of knowledge about the earth or planet on which we live - about the mountains, the plains, the oceans, and the atmosphere. It studies the effects of geologic hazards, such as earthquakes, landslides, floods and volcanic eruptions. It also addresses the ways to conserve and protect the world's fragile geologic environment.

Planetary science concerns itself with the study of the origin of galaxies and the universe, along with the laws which order these systems and bodies.

Note: All courses in the Department of Earth and Planetary Sciences are not offered each semester.

## Requirements

### Associate Degree Graduation Requirements

Complete all of the following:

1. All Department Requirements listed below with a "C" or better or "P" in each course (at least 20% of the department requirements must be completed through SBCC).
2. One of the following three General Education options:
  - a. OPTION 1: A minimum of 18 units of SBCC General Education Requirements (<https://catalog.sbccc.edu/degrees-certificates-awards/#associateddegree>) (Areas A-D) and Institutional Requirements (Area E) and Information Competency Requirement (Area F) OR
  - b. OPTION 2: IGETC (<https://catalog.sbccc.edu/transfer-curricula/#igetctext>) Pattern OR
  - c. OPTION 3: CSU GE Breadth (<https://catalog.sbccc.edu/transfer-curricula/#csugebtext>) Pattern
3. A total of 60 degree-applicable units (SBCC courses numbered 100 and higher).
4. Maintain a cumulative GPA of 2.0 or better in all units attempted at SBCC.
5. Maintain a cumulative GPA of 2.0 or better in all college units attempted.
6. A minimum of 12 units through SBCC.

Code	Title	Units
<b>Department Requirements</b>		
ERTH 111 or ERTH 111H	Dynamic Earth - Physical Geology Dynamic Earth - Physical Geology, Honors	3-4
ERTH 111L	Dynamic Earth - Physical Geology Laboratory	1
ERTH 112	History Of The Earth	3
ERTH 112L	Historical Geology Laboratory	1
ERTH 125	Mineralogy and Resources	5
ERTH 126	Petrology and Rock-Forming Minerals	5
CHEM 155	General Chemistry I	5
CHEM 156	General Chemistry II	5

MATH 150	Calculus with Analytic Geometry I	5
Complete 4 units from the following:		4-4.5
ERTH 131	Geologic Field Studies - Eastern Sierra Nevada	
ERTH 132	Geologic Field Studies - Death Valley	
ERTH 133	Introductory Geologic Field Seminar - Colorado Plateau	
ERTH 134	Geologic Field Studies - Western Sierra Nevada	
ERTH 137	Introductory Field Geology	
ERTH 138	Geology Field Camp	
ERTH 231A	Field Study - Mineralogy and Mineral Resources of the Eastern Sierra Nevada	
ERTH 231B	Field Study - Energy Resources of the Eastern Sierra Nevada	
ERTH 232A	Field Study - Petrology of the Death Valley Region	
ERTH 232B	Field Study - Mineral Resources and Plate Tectonic History of the Death Valley Region	
ERTH 233	Advanced Geologic Field Seminar - Colorado Plateau	
<b>Total Units</b>		<b>37.00-38.50</b>

### Recommended for Transfer

These additional courses should be considered when planning a program of study for transfer as a geology major:

Code	Title	Units
MATH 160	Calculus with Analytic Geometry II	5
PHYS 102	Introductory Physics For Science Majors	4

## Learning Outcomes

1. Evaluate earth processes and/or earth history, using earth materials and geologic principles.
2. Classify and interpret rocks, minerals and fossils.
3. Recognize and assess geologic processes in the field.
4. Read and interpret geologic data.

## Recommended Sequence

Make an appointment with your SBCC academic counselor through Starfish to create a Student Education Plan that reflects a recommended course sequence for this program that is tailored to your individual needs.

How to schedule an Academic Counseling appointment (<https://www.sbccc.edu/counselingcenter/counselingappointments.php>).