



# Geology Associate of Science Degree

Geology is the study of the origin and evolution of the earth, utilizing the principles of mathematics, chemistry, physics and biology. The concept of geologic time and the principles of uniformitarianism help geologists to understand the processes that shape the earth and its environments. Geologists study rocks, minerals and fossils in an effort to draw conclusions about both the earth's observable surface processes that meet the eye, and the earth's interior.

## SUGGESTED PROGRAM COURSE SCHEDULE

### SEMESTER 1

16 UNITS

Course	Units	Pre-Reqs <sup>^</sup>	Semesters offered*	GE Area
<b>GEOL 300</b> Physical Geology	3		F, S	CRC Area IV
<b>GEOL 301</b> Phys Geol Lab	1	Co- or Prereq: GEOL 300	F, S	CSU Area B3
<b>CHEM 300</b> Beg Chemistry	4	MATH 100	F, S, Su	CSU Area B1
<b>MATH 335</b> Trigonometry w/ College Algebra	5	MATH 120	F, S, Su	CRC Area II(b)
<b>CRC Area II(a)</b> Writing competency	3		F, S, Su	CRC Area II(a)

### SEMESTER 2

15 UNITS

Course	Units	Pre-Reqs <sup>^</sup>	Semesters offered*	GE Area
<b>GEOL 310</b> Historical Geol	3	Advisory: GEOL 300 or 305	Su	CRC Area IV
<b>GEOL 311</b> Historical Geol Lab	1	Co-req: GEOL 310; Advisory: GEOL 300 & 301	Su	
<b>CHEM 400</b> General Chem I	5	CHEM 300 or 1 yr of HS Chem + lab and MATH 120	F, S, Su	CRC Area IV
<b>MATH 370</b> Pre-Calc Mathematics	5	MATH 335	F, S	CRC Area II(b)
<b>CRC Area III(a)</b> Physical Edu Activity	1		F, S, Su	CRC Area III(a)

<sup>^</sup>You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

\*(O) = online available (H) = hybrid available

### Career Options/Outlook:

Geological Sample Test Technicians test or analyze geological samples, crude oil, or minerals to detect presence of petroleum, gas, or mineral deposits indicating potential for exploration or production or to determine physical or chemical properties to ensure that products meet quality standards.

**Career opportunities require more than two years of college study.**

### A sample of reported job titles:

Core Inspector, Electron Microprobe Operator, Environmental Field Services Technician, Environmental Sampling Technician, Laboratory Technician, Materials Technician, Organic Section Technical Lead, Physical Science Technician, Quality Control Technician (QC Technician), Research Associate

### Projected job opening in California (2016-2026):

150

### Projected growth:

Much faster than average (15% +)

### Salary in California:

Median wage (2017) with advanced degree: \$51,150/yr

Source:

<https://www.onetonline.org/link/summary/19-4041.02>

**SEMESTER 3**

**16 UNITS**

Course	Units	Pre-Reqs <sup>^</sup>	Semesters offered*	GE Area
<b>CHEM 401</b> Gem Chem II	5	CHEM 400	F, S	
<b>MATH 400</b> Calculus I	5	MATH 370	F, S	CRC Area II(b)
<b>CRC Area III(b)</b> Life Development Skills Or taken in summer	3		F, S, Su	CRC Area III(b)
<b>CRC Area I</b> Humanities Or taken in summer	3		F, S, Su	CRC Area I

**SEMESTER 4**

**14 UNITS**

Course	Units	Pre-Reqs <sup>^</sup>	Semesters offered*	GE Area
<b>MATH 401</b> Calculus II	5	MATH 400	F, S	CRC Area II(b)
<b>CRC Area V(a)</b> American Institutions Or taken in summer	3		F, S, Su	CRC Area V(a)
<b>CRC Area V(b)</b> Soc & Beh Sciences Or taken in summer	3		F, S, Su	CRC Area V(b)
<b>CRC Area VI</b> Ethnic/Multicultural Studies Or taken in summer	3		F, S, Su	CRC Area VI

<sup>^</sup>You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

\*(O) = online available (H) = hybrid available

**Honors option:**

The CRC Honors Program is designed specifically for academically accomplished students and for students with the potential for high achievement. Students who complete 15 units or more in honors-designated courses will earn special recognition as an Honors Scholar, a distinction that may entitle the student to guaranteed transfer and scholarship opportunities at select transfer colleges and universities.

**Transfer notes:**

Please meet with a counselor for specific transfer course evaluation or transferring to a specific 4-year institution.

**General Education (GE):**

Non-specified GE courses identified by CRC Area, CSU Area or IGETC Area without pre- or co-requisite can be taken at any semester.