



Geology AS-T 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 uniformitarianism principles help geologists understand the processes that shape the earth and its environments. Geologists study rocks, minerals, and fossils to conclude the earth's observable surface processes that meet the eye and the earth's interior.

Total Units: 61

First Year

Semester 1

15 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
GEOL 300 Physical Geology	3	Advisory: Co-req: GEOL 301	F, S	Cal-GETC Area 5A
GEOL 301 Physical Geology Laboratory	1	Pre- or co-req: GEOL 300	F, S	Cal-GETC Area 5C
MATH 400 Calculus I	5	MATH 370	F, S	Cal-GETC Area 2
CalGETC Area 1A-English Composition	3	Recommend meeting with a counselor	F, S, Su	Cal-GETC Area 1A
CalGETC Area 3A-Arts	3		F, S, Su	Cal-GETC Area 3A

¹ Units needed to total 60 units for graduation. Refer to [Course Number](#) for the appropriate course level necessary for the degree.

Semester 2

16 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
CHEM 400 General Chemistry I	5	Intermediate Algebra and CHEM 300, 305, 309 or 1 yr of HS Chem with Lab	F, S, Su	Cal-GETC Area 5A & 5C
MATH 401 Calculus II	5	MATH 400	F, S	Cal-GETC Area 2
CalGETC Area 1B-Critical Thinking	3		F, S, Su	Cal-GETC Area 1B
CalGETC Area 1C-Oral Communication	3		F, S, Su	Cal-GETC Area 1C

Year 2

Career

Options/Outlook:

Geological Sample Test Technicians test or analyze geological samples, crude oil, or minerals to detect the presence of petroleum, gas, or mineral deposits indicating the potential for exploration or production or to determine physical or chemical properties to ensure that products meet quality standards. **Career opportunities require more than an associate degree.**

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 openings in California (2020-2030):

150

Projected growth in California (2020-2030):

9% growth

Semester 3

14 UNITS

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
CHEM 401 General Chemistry II	5			Cal-GETC Area 5A & 5C
CalGETC Area 4-Social & Behavioral Sciences¹	3		F, S, Su	Cal-GETC Area 4
CalGETC Area 6-Ethnic Studies	3		F, S, Su	Cal-GETC Area 6
Any transferable elective¹	3			

¹ A total of 6 units from 2 disciplines is required to meet IGETC Area 4.

Semester 4

16 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*	GE AREA
GEOL 310 Historical Geology	3	Advisory: GEOL 300 or 305	Su	Cal-GETC Area 5A
GEOL 311 Historical Geology Laboratory	1	Co-req: GEOL 310; Advisory: GEOL 300 & 301	Su	Cal-GETC Area 5C
CalGETC Area 4-Social & Behavioral Sciences¹	3		F, S, Su	Cal-GETC Area 4
CalGETC Area 3B-Humanities	3		F, S, Su	Cal-GETC Area 3B
Any transferable elective¹	3			
CalGETC Area 5B-Biological Science	3		F, S, Su	Cal-GETC Area 5B

¹ A total of 6 units from 2 disciplines is required to meet IGETC Area 4.

^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 (P) = partially online

Median Salary in California with advanced degree (2021):

\$61,930/yr

Source:

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

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 or Cal-GETC Area without pre- or co-requisites can be taken at any semester.

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.

About this program map:

This program map represents one possible pathway to complete the program. Please see a counselor to create an education plan customized to meet your needs. This map is not a guarantee of course availability or financial aid applicability.

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the [Zero Textbook Costs](#) page of the college website.

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Counselor Contact: Anna Davtian or Ray Mapeso | Faculty Contact: Hiram Jackson