Geology

Warriors on the Way to STEM
WOW2STEM

Gavilan College

Geology, the scientific study of the Earth, is a cornerstone of the well-being of society as it addresses the fundamental issues of water supply, development of energy resources, constructing with the Earth, search for mineral resources, and responsible management of the environment. The Geology Program at Stanislaus State is headquartered in the state-of-the-art Naraghi Hall of Science, and makes ample use of field education opportunities in the Sierra Nevada, the Central Valley, and the Coast Ranges.

What can I do with a degree in Geology?

Possible career paths/fields of work include hydrogeology, petroleum geology, engineering geology, mineral deposits geology, and environmental geology. Geologists work for engineering companies, energy companies, counties and municipalities, and state agencies. Some geologists are engaged as educators, museum curators, and as water and environmental paralegals.

How can I participate in WOW2STEM?

- **Meet with a STEM counselor each semester at your community college.**
- **Follow a student educational plan (SEP) as outlined by a STEM counselor.**
- **Attend presentations and workshops throughout the year.**
- **Follow application dates and deadlines as directed by the Transfer Advisor and Stanislaus State.**

For more information you may contact:
Iqbal Atwal, Transfer Specialist
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www.csustan.edu/STEM-success

Dr. Horacio Ferriz is a Professional Geologist and Certified Engineering Geologist. He teaches Applied Geology, Geophysical Exploration, and Hydrogeology at Stanislaus State. His research includes geophysical assessment of levees, which he plans to do with students from Junior colleges.

Geology B.S. Roadmap

Prerequisites to Lower-Division Courses	Lower-Division Courses at Gavilan College
CHEM 30A & MATH 240	CHEM 1A (Gen. Chemistry/lab)
MATH 8A	PHYS 2A (Gen. Physics I)
Recommended: Eligible for English 250 and English 260.	GEOL 1 (Intro to Geology)
MATH 8B w/ "C" or better **or** MATH 240 MATH 240 w/ "C" or better **or** MATH 240 MATH 240 **or** - -	**Complete one sequence:** MATH 1A & MATH 1B (Single-variable Calculus & Analytical Geometry) **or** MATH 8A **&** 8B (Precalculus) MATH 7 (Finite Mathematics) **or** MATH 8A **&** 8B (Precalculus) MATH 5 (Intro to Statistics) **or** College Algebra* College Trigonometry *

NOTE: To prepare for the major and earn an Associate Degree for Transfer, see a counselor.

- Students transferring into the Stanislaus State Geology Program in **odd** numbered years can complete the degree in **2 years**.
- Students transferring into the Stanislaus State Geology Program in **even** numbered years can complete the degree in **3 years**.
- All estimates of degree completion assume that ALL prerequisites are met upon transferring into Stanislaus State.
- The courses followed by an asterisk (*) are not offered at Gavilan College and may be completed at CSU Stanislaus.

Major Course Requirements at Stanislaus State

GEOL 2200 History of Earth and Life (Spring)

GEOL 2202 History of Earth and Life Lab (Spring)

GEOL 3250—Mineralogy[1]

GEOL 3810—Hydrogeology[4]

GEOL 4100—Igneous and Metamorphic Petrology[2]

GEOL 4350—Geophysical Exploration[1]

GEOL 4360—Structural Geology[3]

GEOL 4380—Sedimentary Rocks and Depositional Environments[3]

GEOL 4390—Paleontology and Stratigraphy[1]

GEOL 4400—Applied Geology[2]

GEOL 4402—Applied Geology Laboratory[2]

GEOL 4500—Field Geology (WP)[4]

GEOL 4700—Plate Tectonics[4]

Electives (11 units)

Applied Geology Concentration (11 units)

For all degree requirements visit
www.csustan.edu/roadmaps

At Stanislaus State, most upper division Geology courses are offered on a 2-year rotation. The list below indicates the term and year in which the courses are offered.

1. ***Fall of odd numbered years: 2013, 2015 & 2017***
2. ***Spring of even numbered years: 2014, 2016 & 2018***
3. ***Fall of even numbered years: 2014, 2016 & 2018***
4. ***Spring of odd number years: 2013, 2015 & 2017***

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