

Geology

School of Mathematics, Science, and Engineering

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General Description

Geology is the study of the composition, structure, and evolution of the Earth. It is an interdisciplinary science that combines geological observations and concepts with those of biology, chemistry, physics, and mathematics. This department explores rocks, minerals, fossils, and geologic principles and the processes such as plate tectonics, continental drift, and rock forming that continue to shape the Earth and its environments. Specialization within the field of geology ranges from engineering and geophysics to paleontology and marine geology.

Career Options

Below is a sample of the career options available for the geology major. A few of these require an associate in science degree, most require a bachelor's degree, and some require a graduate-level degree: geologist, soils engineer, geological technician, earth science teacher, college instructor, geophysicist, park ranger, land use planner, geochemist, astrogeologist, marine geologist, glacial geologist, mining geologist, photogeologist, oil and gas geologist, mineralogist, paleontologist, volcanologist, and seismologist.

Degree/Certificate Options

Associate in Science Degree: Transfer Preparation

Geology

Major Code

01780

Consult with a counselor to develop a Student Education Plan (SEP), which lists the courses necessary to achieve your academic goal.

ASSOCIATE IN SCIENCE DEGREE

Geology

Transfer Preparation * (Major Code: 01780)

Designed for students who desire a general background in the field of geology in preparation for transfer to another college or university. Some of the courses listed below require the completion of prerequisites, and students should begin with the study of biology and mathematics.

Geology majors are advised to give first priority to lower-division requirements for the major as they are prerequisites for most upper-division courses. Only as many general education courses should be taken as can be included in the 70-unit transfer limitation, and these must be chosen with care to ensure that they fit into the general education pattern at the transfer school.

First Semester

BIOL 100	Principles of Biology	3
BIOL 101	Principles of Biology Laboratory	1
GEOL 100	Principles of Geology	3
GEOL 101	General Geology Laboratory	1
MATH 250	Analytic Geometry and Calculus I	5

Second Semester

CHEM 200	General Chemistry I	5
MATH 251	Analytic Geometry and Calculus II	4
PHYS 270	Principles of Physics I	3
PHYS 271	Principles of Physics Laboratory I	1

Third Semester

CHEM 210	General Chemistry II	5
MATH 252	Analytic Geometry and Calculus III	4
PHYS 272	Principles of Physics II	3
PHYS 273	Principles of Physics Laboratory II	1

Fourth Semester

MATH 130	Introduction to Computer Programming	4
PHYS 274	Principles of Physics III	3
PHYS 275	Principles of Physics Laboratory III	1

Total units 47

To earn an associate degree, additional general education and graduation requirements must be completed. See page 51.

* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. **See catalog TRANSFER COURSES INFORMATION section on page 33 for further information.**