

EARTH SCIENCE ASSOCIATE OF SCIENCE

The Earth Science Associate of Science degree at Mendocino College reflects the many opportunities of this broad field, offering a suite of courses to prepare students with a sound physical science background via the application of scientific principles, problem solving techniques and critical thinking, with an emphasis on hands-on, experiential learning. Students will study the relationships among geographic places, natural systems and resources, and society, as applied to understanding the earth's history, evolution, our changing climate, and earth resources. Students can obtain the associate degree and build their knowledge base and resume for employment or transfer to a four-year institution to further their studies. As with all degree programs, students who intend to transfer to a four-year institution should research the transfer institution's requirements and plan to complete with the CSU GE Breadth pattern or IGETC GE pattern. Please check with a counselor for more specific transfer information.

Required Courses - Major:		Units
CHM 250	General Chemistry I	5
GEL 201	Geology	3
GEL 201L	Geology Laboratory	1
MTH 210	Calculus and Analytic Geometry I	5
or MTH 230	Calculus for Business and Economics	<u>4</u>
MTH 220	Statistics	4
Plus 12-13 additional units selected from the following:		Units
AGR 108	Soils and Fertility Management	3
CHM 251	General Chemistry II	5
EAS 210	Geology of California	4
EAS 211	Weather and Climate	3
EAS 212	Introduction to Geographic Information Systems	3
GEL 203	Earth History	3
GEL 203L	Earth History Laboratory	1
GEO 201	Cultural Geography	3
GEO 202	World Regional Geography	3
GEO 206	Physical Geography	4
MTH 211	Calculus and Analytic Geometry II	5
NRS 200	Environmental Science	3
NRS 200L	Environmental Science Laboratory	1
PHY 210	General Physics I	4
PHY 211	General Physics II	4
PHY 220	Physics for Scientists and Engineers I	4
PHY 221	Physics for Scientists and Engineers II	4
PHY 222	Physics for Scientists and Engineers III	4
Total Major Units		29 - 31
Total Degree Units		60

Program Level Student Learning Outcomes:

1. Experience problem solving and utilizing different techniques in analytic geometry as demonstrated by satisfactory completion of their first semester calculus class.
2. Experience applying different statistical analyses to address practical problems as demonstrated by satisfactory completion of a mathematical statistics class.
3. Experience in laboratory methods and applications of physical chemistry as demonstrated by satisfactory completion of a first semester chemistry class.
4. Exposure to, and gained knowledge of, basic concepts in geology and related physical science fields that have applications to the earth as demonstrated by satisfactory completion of their earth science elective coursework.

Career Opportunities in EARTH SCIENCE

Completing the Earth Science Associate of Science degree can lead to a variety of opportunities. As a branch of disciplines within STEM (Science, Technology, Engineering, Mathematics), Earth Science is a broad field offering personal satisfaction working on practical problems that are important for our modern society. Obtain the associates degree or tailor a transfer program in order to find employment in a broad spectrum of jobs including but not limited to hydrologist, geologist, geographer, urban planner, park ranger, planetary exploration scientist, environmental scientist, and alternative energy or pollution remediation contractor.