

EARTH SCIENCE, ASSOCIATE IN SCIENCE DEGREE

Financial Aid Eligible
Banner Code: 1_AS_ERTH
Control Number: 36517

This Associate in Sciences Degree is designed to introduce the student to the multidisciplinary field of Earth Science. Students who complete this degree will be prepared for further study in Earth Science or related disciplines, for transfer to B.A./B.S. programs in Earth Science, or as preparation to teach Earth Science at a primary or secondary grade level. This degree requires a total of 24 units of which 16 units are in required courses. An additional 8 units must be chosen from the list of restricted electives.

Program Outcomes

1. Students will be able to demonstrate an understanding of how the scientific method is used to explore topics in earth science and geology.
2. Students will be able to apply earth science/geology concepts to better understand current issues of environmental and/or geologic concern.
3. Students will be able to demonstrate concept mastery.

Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-arts-general-education-option-1/>), Option 1 (OCC AS GE) (<https://catalog.cccd.edu/orange-coast/pathways/math-science-engineering/geology/earth-science-associate-science-degree/orange-coast/general-education-patterns/associate-science-general-education-option-1/>), Option 2 (CSU GE) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-2/>), or Option 3 (IGETC) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-3/>) to satisfy the general

education requirement. See the General Education Patterns section of this catalog for more information.

Course	Title	Units
Required Courses		
<i>Core Courses</i>		
ASTR A100/A100H	Introduction to Astronomy	3
ASTR A100L/A100M	Introduction to Astronomy Laboratory	1
GEOL A105/A105H	General Geology	3
GEOL A105L/A105M	General Geology Laboratory	1
GEOL A185/A185H	Evolution of the Earth	3
GEOL A185L/A185M	Evolution of the Earth Lab	1
MRSC A100/A100H	Oceanography	3
MRSC A100L/A100M	Oceanography Laboratory	1
Restricted Electives		
Select at least eight units of the following:		8
ESEC A100	Introduction to Environmental Science	
ESEC A210	Wetlands Ecology and Management	
GEOL A115	California Geology	
GEOL A131	Weather and Climate	
GEOL A132	Geologic Field Studies - Death Valley	
GEOL A133	Geologic Field Studies - Colorado Plateau	
GEOL A134	Geologic Field Studies - Cascade Range	
GEOL A135	Geology of the Natural Parks and Monuments	
GEOL A136	Geologic Field Studies - San Andreas Fault	
GEOL A137	Introductory Field Geology	
GEOL A138	Geologic Field Studies - Yosemite National Park	
GEOL A139	Geologic Field Studies - Eastern Sierra Nevada	
GEOL A141	Geologic Field Studies - Mojave Desert	
GEOL A142	Geologic Field Studies - Hawaii Volcanology	
GEOL A160	Environmental Geology	
GEOL A165	Natural Disasters	
GEOL A280	Introduction to Mineralogy	
GEOL A285	Petrology	
MRSC A185	Coastal Oceanography	
MRSC A185L	Coastal Oceanography Lab	
Program Major Units		24
AS General Education Option 1, 2, or 3		Varies
Transferable electives as needed to satisfy unit requirement		Varies
Total Units		60