

EARTH SCIENCE, ASSOCIATE IN SCIENCE DEGREE

Banner Code: 1_AS_ERTH

Control Number: 36517

Financial Aid Eligible

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.

Review Graduation Requirements (<https://catalog.cccd.edu/orange-coast/graduation-requirements/associate-degree/>) and General Education (<https://catalog.cccd.edu/orange-coast/general-education-patterns/>).

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/A100H	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	

Course	Title	Units
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	
<i>Program Major Units</i>		24
<i>AS General Education Option 1, 2, or 3</i>		Varies
<i>Transferable electives as needed to satisfy unit requirement</i>		Varies
Total Units		60

Program Sequence

These sequences at Orange Coast College are general course curriculum maps for students to finish all major and general education requirements for two-year completion of degrees, and/or fulfillment of transfer requirements. The course sequence may include course prerequisites and other placement requirements. **Students are advised to meet with an Orange Coast College Counselor to review course selections and sequences to ensure that completion of this program will meet a student's transfer and career goals.**

Course	Title	Units
Year 1		
Semester 1		
ASTR A100 or ASTR A100H	Introduction to Astronomy or Introduction to Astronomy Honors	3
ASTR A100L or ASTR A100M	Introduction to Astronomy Laboratory or Introduction to Astronomy Laboratory Honors	1
OCC AS GE AREA A1 - CHOOSE ONE		3
OCC AS GE AREA C1 - CHOOSE ONE		3
Select one of the following or satisfy Math competency (completion of High School Algebra 2 with a "C" or better):		3-4
MATH A030 or MATH A045	Intermediate Algebra (or higher) ¹ or Combined Elementary and Intermediate Algebra	
Units		13-14
Semester 2		
GEOL A105 or GEOL A105H	General Geology or General Geology Honors	3
GEOL A105L or GEOL A105M	General Geology Laboratory or General Geology Laboratory Honors	1
OCC AS GE AREA A2- CHOOSE ONE ²		3-4
OCC AS GE AREA D- CHOOSE ONE		3
ELECTIVES (DEGREE APPLICABLE)		6
Units		16-17

Course	Title	Units
Summer		
ELECTIVES (DEGREE APPLICABLE)		3
Units		3
Year 2		
Semester 1		
MRSC A100 or MRSC A100H	Oceanography or Oceanography Honors	3
MRSC A100L or MRSC A100M	Oceanography Laboratory or Oceanography Laboratory Honors	1
OCC AS GE AREA C2- CHOOSE ONE		3
AS RESTRICTED ELECTIVE (See Requirements) - CHOOSE ONE ³		4
ELECTIVES (DEGREE APPLICABLE)		3
Units		14
Semester 2		
GEOL A185 or GEOL A185H	Evolution of the Earth or Evolution of the Earth Honors	3
GEOL A185L or GEOL A185M	Evolution of the Earth Lab or Evolution of the Earth Lab Honors	1
AS RESTRICTED ELECTIVE (See Requirements) - CHOOSE ONE ³		4
ELECTIVE (DEGREE APPLICABLE) ⁴		6
Units		14
Total Units		60-62

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Math A030 or higher OR take 3-4 degree applicable elective units if math competency was met through completion of High School Algebra 2 with a "C" or better; *100-level Math courses satisfy AS Math Requirement and OCC AS GE AREA A2

2

OCC AS GE AREA A2 - Required if 100-level MATH will not be taken to meet Math competency. If MATH A100 or higher will be taken, then needs to take 3-4 degree applicable elective units

3

8 units total required

4

VARIES TO REACH MINIMUM 60 DEGREE APPLICABLE UNITS