

EARTH SCIENCES UNDERGRADUATE MAJOR (BS, HBS)

This major offers the following option(s):

- Climate Science (<http://catalog.oregonstate.edu/college-departments/earth-ocean-atmospheric-sciences/earth-sciences-bs-hbs/climate-science-option/>)
- Geology (<http://catalog.oregonstate.edu/college-departments/earth-ocean-atmospheric-sciences/earth-sciences-bs-hbs/geology-option/>)
- Ocean Science (<http://catalog.oregonstate.edu/college-departments/earth-ocean-atmospheric-sciences/earth-sciences-bs-hbs/ocean-science-option/>)

The Earth Sciences major program is among the nation's premier undergraduate programs, serving students with a broad range of interests and career aspirations. The program engages in science and in critical societal issues facing the region, the nation, and the international community.

The Earth Sciences major offers three options: Climate Science (<https://catalog.oregonstate.edu/college-departments/earth-ocean-atmospheric-sciences/earth-sciences-bs-hbs/climate-science-option/>), Geology (<https://catalog.oregonstate.edu/college-departments/earth-ocean-atmospheric-sciences/earth-sciences-bs-hbs/geology-option/>), and Ocean Science (<https://catalog.oregonstate.edu/college-departments/earth-ocean-atmospheric-sciences/earth-sciences-bs-hbs/ocean-science-option/>). The degree emphasizes hands-on learning through laboratory and field, or shipboard, experiences and undergraduate research and internships. The separate options provide preparation for careers with climate, geological or marine science emphasis and are also suited for students interested in careers in environmental science, science education, and in graduate studies.

Major Code: 834

- Learn basic concepts in Earth Sciences in preparation for advanced training in the same. Areas include how the earth, ocean, and atmosphere work and interact.
- Learn basic quantitative skills specific to the major.
- Learn applied practical skills in the discipline at a basic and advanced level through intensive experiential learning.

Code	Title	Credits
Baccalaureate Core		
Select 36-38 credits		36-38
Earth Sciences Major Requirements		
ATS 201	*CLIMATE SCIENCE	4
Select one of the following:		5
CH 231 & CH 261	GENERAL CHEMISTRY and *LABORATORY FOR CHEMISTRY 231	
CH 121	GENERAL CHEMISTRY	
PH 211 or PH 201	*GENERAL PHYSICS WITH CALCULUS *GENERAL PHYSICS	4-5
GEO 201	*PHYSICAL GEOLOGY	4
GEO 202	*EARTH SYSTEMS SCIENCE	4
MTH 251	*DIFFERENTIAL CALCULUS	4
OC 201	*OCEANOGRAPHY	4
ST 351	INTRODUCTION TO STATISTICAL METHODS	4

Select one of the following 'skills' courses:		3-4
CBEE 102	ENGINEERING PROBLEM SOLVING AND COMPUTATIONS	
ENGR 112	INTRODUCTION TO ENGINEERING COMPUTING	
GEOG 360	GISCIENCE I: GEOGRAPHIC INFORMATION SYSTEMS AND THEORY	
PH 265	SCIENTIFIC COMPUTING	
ST 352	INTRODUCTION TO STATISTICAL METHODS	
Earth Sciences Options		
Select one of the following:		61-81
Climate Science		
Geology		
Ocean Science		
Total credits required for graduation		180

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Baccalaureate Core Course

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