

# EARTH SYSTEMS, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

## Program Description

The recognition that environmental problems are global in extent, and impact many different components of the Earth system simultaneously, requires that we adopt a large-scale and interdisciplinary approach to questions of global change and the interactions of the physical and human environments. The Earth Systems minor follows such an approach and offers undergraduates the opportunity to study the Earth as an integrated system. The Earth Systems minor is a science minor offered through the College of Earth and Mineral Sciences. It provides a wider interdisciplinary perspective for majors in the traditional Earth science disciplines (geography, geoscience, and meteorology), and provides an introduction to Earth sciences and a broad exposure to Earth systems/environmental studies for other science and engineering majors. Students may apply up to 6 credits from courses in the major department to satisfy the minor requirements.

## What is Earth Systems?

Pursuing a minor in Earth Systems can help you build a better understanding of the complexly interwoven relationships within natural systems. Through this interdisciplinary minor, you will develop a comprehensive view of how Earth's systems—the processes driving atmospheric, oceanic, and land changes—interact with one another and how humans both affect and are affected by those processes. This minor would provide a useful complement to any student interested in environmental sciences, policy, or engineering.

## You Might Like This Program If...

- You want to understand the big picture of how change happens to the Earth.
- You are interested in the environment.
- You like to contemplate the complexity of natural systems.

## Program Requirements

Requirement	Credits
Requirements for the Minor	18

### Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10>). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

Code	Title	Credits
<b>Prescribed Courses</b>		
<i>Prescribed Courses: Require a grade of C or better</i>		
EARTH 2	The Earth System and Global Change	3
<b>Additional Courses</b>		
<i>Additional Courses: Require a grade of C or better</i>		
Select 6 credits of the following:		6

EARTH 103N	Earth in the Future: Predicting Climate Change and Its Impacts Over the Next Century
EMSC 470W	Undergraduate Collaborative Research in Earth and Materials Sciences
GEOG 430	Human Use of Environment
GEOSC 310	Earth History
METEO 300	Fundamentals of Atmospheric Science

### Supporting Courses and Related Areas

*Supporting Courses and Related Areas: Require a grade of C or better*

Select 9 credits from the Earth Systems Committee's approved list of courses 9

## Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/>)

## University Park

**Jacob Hoover**

Undergraduate Program Coordinator

542 Deike Building

University Park, PA 16802

814-865-7791

[undergrad@geosc.psu.edu](mailto:undergrad@geosc.psu.edu)

## Contact

### University Park

DEPARTMENT OF GEOSCIENCES

503 Deike Building

University Park, PA 16802

814-865-6711

[contact@geosc.psu.edu](mailto:contact@geosc.psu.edu)

<https://www.geosc.psu.edu>