

EARTH AND ENVIRONMENTAL SCIENCE, PHD

The mission of the Graduate Group of the Department Earth and Environmental Science is to produce independent, well-rounded scientists that are exceptionally competent in their area of specialization and capable of understanding, solving, and communicating complex and interdisciplinary scientific issues.

The graduate group guides research leading to Doctoral degrees in the range of fields that encompass our research interests:

- Biogeochemistry (terrestrial and ocean)
- Environmental Geology
- Geophysics
- Paleobiology
- Surficial processes

For more information: <http://www.sas.upenn.edu/earth/graduate/doctoral-programs> (<http://www.sas.upenn.edu/earth/graduate/doctoral-programs/>)

View the University's Academic Rules for PhD Programs (<http://catalog.upenn.edu/pennbook/academic-rules-phd/>).

Sample Plan of Study

The total course units required for graduation is 20.

Code	Title	Course Units
Year 1		
<i>Fall</i>		
	Select 2 courses	
	Select two EASC 9999 courses	
	University Driving Safety Class	
<i>Spring</i>		
	Select 2 courses	
	Select two EASC 9999 courses	
	Thesis Research	
	GeoLunch	
Year 2		
<i>Fall</i>		
	Select 1-2 courses and remainder of EASC 9999 courses	
	Qualifying Exam (for students entering with Masters degree)	
	TA (fall or spring)	
<i>Spring</i>		
	Select additional courses and remainder of EASC 9999 courses	
	Proposal Defense	
	Qualifying Exam (for students entering without Masters degree)	
	TA (fall or spring)	
Year 3		
<i>Fall</i>		
	TA (fall or spring)	

Dissertation Research
<i>Spring</i>
TA (fall or spring)
Dissertation Research
Year 4
<i>Fall</i>
TA (fall or spring)
Dissertation Research
<i>Spring</i>
TA (fall or spring)
Dissertation Research and Defense

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2023 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.