

GEOPHYSICS, 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 Requirements

Requirement	Credits
Requirements for the Minor	29-32

Requirements for the Minor

The minor consists of 18-20 credits satisfying the requirements below.

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/students/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/>). 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
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better</i>		
GEOSC 1	Physical Geology	3
MATH 140	Calculus With Analytic Geometry I	4
PHYS 212	General Physics: Electricity and Magnetism	4
Additional Courses		18-21
<i>Additional Courses: Require a grade of C or better</i>		
<i>Non-Geoscience Majors</i>		
GEOSC 203	Physical Processes in Geology	
Select 3 credits from the following:		
EARTH 2	The Earth System and Global Change	
EARTH 101	Natural Disasters: Hollywood vs. Reality	
EARTH 105N	Environments of Africa: Geology and Climate Change	
EARTH 106		
GEOSC 1	Physical Geology	
GEOSC 10	Geology of the National Parks	
GEOSC 40	The Sea Around Us	
GEOSC 109H	Earthquakes and Society	
Select 11-13 credits of the following:		
GEOSC 402Y	Natural Disasters	
GEOSC 434	Volcanology	
GEOSC 452	Hydrogeology	
GEOSC 483	Environmental Geophysics	
GEOSC 487	Analysis of Time Series	
GEOSC 488	An Introduction to Seismology	
GEOSC 489	Dynamics of the Earth	
<i>Geoscience Majors</i> ¹		
PHYS 212	General Physics: Electricity and Magnetism	
Select 3-4 credits of the following:		
MATH 220	Matrices	
MATH 230	Calculus and Vector Analysis	
MATH 231	Calculus of Several Variables	

MATH 232	Integral Vector Calculus
MATH 250	Ordinary Differential Equations
MATH 251	Ordinary and Partial Differential Equations
Select 11-13 credits of the following:	
GEOSC 402Y	Natural Disasters
GEOSC 434	Volcanology
GEOSC 452	Hydrogeology
GEOSC 483	Environmental Geophysics
GEOSC 487	Analysis of Time Series
GEOSC 488	An Introduction to Seismology
GEOSC 489	Dynamics of the Earth

¹ Geoscience majors may not double count these courses in their major.