

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 | |

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| 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.