GEOPHYSICS MINOR

Geophysics seeks to understand the inner workings of inner earth and its surroundings. A variety of physical measurements – involving seismic waves, magnetic fields, gravity, electric potential and satellite-based geodesy – are made to probe the interior and study the surface and internal process of our planet. The geophysics study encompasses field work as well as theoretical and experimental studies, through which students will learn about the mechanics of landslides, earthquakes and other natural hazards. Employment opportunities include oil, gas, petroleum and mineral exploration companies and environmental consulting companies. This minor could also serve as a pathway for entry to a graduate program in seismology.

The Geophysics minor requires a minimum of 23-25 credits.

Code	Title	Credits
Geology courses [1]		
ESG 1010	Geology: The Science of the Earth	3
ESG 1011	Geology: The Science of the Earth Laboratory	1
ESG 5210	Environmental and Applied Geophysics	4
Select one of the following:		4
ESG 3300	Structural Geology	
ESG 5420	Mathematical Methods in Earth Science	
ESG 5450	Hydrogeology	
ESG 6400	Isotopes: Applications in Geological and Environmental Sciences	
Physics courses		
PHY 2170 & PHY 2171	University Physics I for Scientists and Engineers and University Physics I Experimental Laboratory	4-5
or PHY 2175	University Physics for Engineers I	
PHY 2180 & PHY 2181	University Physics II for Scientists and Engineers and University Physics II Experimental Laboratory	4-5
or PHY 2185	University Physics for Engineers II	
Select one of the following:		3
PHY 3300	Introductory Modern Physics	
PHY 5100	Methods of Theoretical Physics I	
PHY 5200	Classical Mechanics I	
PHY 5340	Optics	
PHY 3310 & PHY 3750	Introductory Modern Physics Laboratory and Introduction to Computational Methods	
Another PHY course above the 4000 level [2]		
Total Credits		**23-25**

[1] Two courses must not have been applied toward major requirements or another minor

[2] The course should be chosen in consultation with an advisor.