

# PETROLEUM AND NATURAL GAS ENGINEERING, 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	23

### Requirements for the Minor

A minimum of 23 credits is required 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>		
PHYS 211	General Physics: Mechanics	4
PNG 405	Rock and Fluid Properties	3
PNG 406	Rock and Fluid Laboratory	1
PNG 410	Applied Reservoir Engineering	3
PNG 440W	Formation Evaluation	3
<b>Additional Courses</b>		
<i>Additional Courses: Require a grade of C or better</i>		
Select 9 credits of the following:		9
PNG 411	Introduction to Petroleum and Natural Gas Extraction	
PNG 420	Applied Reservoir Analysis and Secondary Recovery	
PNG 425	Principles of Well Testing and Evaluation	
PNG 430	Reservoir Modeling	
PNG 450	Drilling Engineering	
PNG 451	Drilling Laboratory	
PNG 475	Production and Completions Engineering	
PNG 480	Surface Production Engineering	
PNG 482	Production Engineering Laboratory	
PNG 496	Independent Studies	