

The Ohio State University  
College of Engineering

Petroleum Engineering Minor

Department of Chemical and Biomolecular Engineering  
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Petroleum Engineering is the science of dealing with oil and gas industry in three different major sectors: Upstream, midstream, and downstream. Upstream comprises exploration and production, which includes searching for potential underground or underwater crude oil and natural gas fields, drilling exploratory wells, and subsequently drilling and operating the wells that recover and bring the crude oil and/or raw natural gas to the surface. Midstream involves the transportation (by pipeline, rail, barge, oil tanker or truck), storage, and wholesale marketing of crude or refined petroleum products. Downstream refers to the refining of petroleum crude oil and the processing and purifying of raw natural gas, as well as the marketing and distribution of products derived from crude oil and natural gas.

Students in the Petroleum Engineering minor will be exposed to the main petroleum engineering subjects, especially for the upstream sector. They will be equipped with an understanding of the vocabulary and engineering fundamentals needed to succeed in the oil and gas industry. They will also increase their involvement in the petroleum industry including field trips and facilities visits, and build knowledge about the current practices and issues related to the petroleum industry for conventional and unconventional resources, Utica and Marcellus Shales in particular.

The minor requires successful completion of 15 credit hours:

**Required core course** (12 credit hours)

EARTHSC 5661: Petroleum Geology (3)  
CBE 5200: Introduction to Petroleum Engineering (3)  
CBE 5210: Petroleum Reservoir Engineering (3)  
CBE 5230: Petroleum Drilling and Production Engineering (3)

**Elective** (3 credit hours)

EARTHSC 5751: Quantitative Reservoir Modeling (3)  
EARTHSC 5687: Energy Geophysics (3)  
CBE 5240: Petroleum Rock and Fluid Properties (3)  
CBE 5250: Enhanced Oil Recovery (3)  
CBE 5260: Petroleum Project Evaluation (3)

**Petroleum Engineering Minor program guidelines**

Required for graduation No

Credit hours required A minimum of 15 hours. At least 6 credit hours must be at the 3000 level or above.

Transfer and EM credit hours allowed A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination.

Overlap with the GE A student is permitted to overlap up to 6 credit hours between the GE and the minor.

Overlap with the major and additional minor(s)

- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minor(s).

Grades required

- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative point-hour ratio required for the minor.
- Course work graded Pass/Non-Pass cannot count toward the minor.

Minor approval The minor course work must be approved by the Department of Chemical and Biomolecular Engineering.

Filing the minor program form The student must fill out the Minor Student Information Form with all required information, and get this approved by the Minor Advisor.

Changing the minor Once the minor program is filed, any changes must be approved by the minor Advisor. This form is available on the College of Engineering website.

College of Arts and Sciences  
Curriculum and Assessment Services  
154 Denney Hall, 164 Annie & John Glenn Ave.  
<http://artsandsciences.osu.edu>  
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