

Bachelor of Science in Petroleum Engineering (as of Fall 2016)

All students must meet each semester with their academic advisor.

Requires 128 credits (36 of which must be numbered 300 or above and 60 of which must be from a 4-year institution) including:

I. Essential Studies Requirements (see University *ES* listing).

II. The Following Curriculum:

First Year

Fall Semester

Chem 121/L	General Chemistry I (<i>ES=Q</i>)	(4) ___
Engl 110	College Composition I	(3) ___
Engr 200	Computer Applications in Eng.	(2) ___
GeoE 210	Earth Dynamics & Geophysics	(4) ___
Math 165	Calculus I	(4) ___
Semester Total		(17)

Spring Semester

PtrE 201	Intro to Petroleum Eng	(3) ___
Math 166	Calculus II	(4) ___
Phys 251/L	University Physics I/Lab	(4) ___
Chem 122/L	General Chemistry II	(4) ___
<u>Arts & Humanities Elective (<i>ES= G or U</i>)</u>		<u>(3) ___</u>
Semester Total		(18)

Second Year

Fall Semester

Engr 201	Statics	(3) ___
PtrE 301	Reservoir Rock Properties	(3) ___
Math 265	Calculus III	(4) ___
Phys 252/252L	University Physics II/Lab	(4) ___
ME 341	Thermodynamics	(3) ___
Semester Total		(17)

Spring Semester

ME 306	Fluid Mechanics	(3) ___
PtrE 311	Petro Fluid Properties	(3) ___
Geol 407	Petroleum Geology	(3) ___
Engr 203	Mechanics of Materials	(3) ___
PtrE 361	Petroleum Eng Lab I	(2) ___
<u>Math 266 Elementary Differential Eq.</u>		<u>(3) ___</u>
Semester Total		(17)

Third Year

Fall Semester

PtrE 401	Well Logging	(3) ___
PtrE 431	Reservoir Engineering	(3) ___
PtrE 411	Drilling Engineering	(3) ___
Arts & Humanities Elective (<i>ES=G or U</i>)		(3) ___
Statistics	Geol 520, Math 321, or ChE 315	(3) ___
Semester Total		(15)

Spring Semester

Social Science Elective (<i>ES=G or U</i>)		(3) ___
PtrE 451	Adv. Drilling Engineering	(3) ___
PtrE 445	Adv. Reservoir Eng.	(3) ___
Technical Elective		(3) ___
Engl 130	Composition II: Writ for Pub.	(3) ___
Semester Total		(15)

Fourth Year

Fall Semester

PtrE 421	Production Engineering	(3) ___
PtrE 465	Petroleum Geomechanics	(3) ___
PtrE 471	Numerical Res Simulation	(3) ___
PtrE 485	Research Design (<i>ES=O</i>)	(3) ___
PtrE 405	Petr. Eng. Econ and Law	(3) ___
Semester Total		(15)

Spring Semester

Ethics Elective		(3) ___
Technical Elective		(3) ___
PtrE 484	Senior Design (<i>ES =A & C</i>)	(3) ___
PtrE 462	Petroleum Eng Laboratory II	(2) ___
<u>Arts & Humanities Elective (<i>ES=G or U</i>)</u>		<u>(3) ___</u>
Semester Total		(14)
Curriculum Total		(128)

ES = represents courses satisfying the Essential Studies requirements of the University

Approved Electives for Petroleum Engineering

Degree candidates are to select from the following lists, (2) technical electives and (1) Ethics elective.

Approved Courses for Technical Elective:

Geog 474/L Introduction to GIS (3)
GeoE 351 Petroleum Development Engr. (3)
GeoE 493 Special topics in Geo. Eng. (3)
CIEN 431 Environmental Engineering (3)
Any geology electives 300 level or higher may be used dependent upon departmental consent

Approved Courses for Ethics Elective:

ChE 340 Professional Integrity in Engineering (3) (*ES=SS*)
ME 370 Engineering Disasters and Ethics (3) (*ES=SS*)
Phil 250 Ethics in Engineering & Science (3) (*ES=H*)

Petroleum Engineering Degree Program Educational Goals

The undergraduate Program Educational Objectives (PEO) are the expected accomplishments of graduates during their first few years following graduation. The PEOs of the Department of Petroleum Engineering (PTRE) as adopted by the PTRE faculty and Industry Advisor Board are as follows:

1. Perform as engineering professionals in industry, including government or academia;
2. Pursue continued education and professional development through participation in professional organizations and possible post graduate education;
3. Progression or attainment of professional registration and licensure.