

# PETROLEUM ENGINEERING, BACHELOR OF SCIENCE IN PETROLEUM ENGINEERING

Minimum Total Credit Hours: 127

Overall GPA - Combined and OU: 2.50

Major GPA - Combined and OU: 2.50

Curriculum GPA - Combined and OU: 2.50

Program Code: B765

A minimum grade of C is required for each course in the curriculum.

Courses designated as Core I, II, III, IV, or Capstone are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved lists.

Students must successfully complete prerequisite courses (with a minimum C grade) before proceeding to the next course.

Two college-level courses in a single foreign language are required; this may be satisfied by successful completion of 2 years in a single foreign language in high school. Students who must take foreign language at the University will have an additional 6-10 hours of coursework.

Course	Title	Credit Hours
<b>Freshman</b>		
<b>First Semester</b>		
ENGL 1113	Principles of English Composition (Core I)	3
CHEM 1315	General Chemistry (Core II) <sup>1</sup>	5
MATH 1914	Differential and Integral Calculus I (Core I) <sup>2</sup>	4
HIST 1483 or HIST 1493	United States, 1492 to 1865 (Core IV) or United States, 1865 to the Present	3
Approved Elective: Social Science (Core III) <sup>3</sup>		3
	Credit Hours	18
<b>Second Semester</b>		
ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
CHEM 1415	General Chemistry (Continued) <sup>1</sup>	5
MATH 2924	Differential and Integral Calculus II <sup>2</sup>	4
PHYS 2514	General Physics for Engineering and Science Majors (Core II)	4
P E 2011	Introduction to Petroleum Engineering	1
	Credit Hours	17
<b>Sophomore</b>		
<b>First Semester</b>		
MATH 2934	Differential and Integral Calculus III <sup>2</sup>	4
PHYS 2524	General Physics for Engineering and Science Majors	4
GEOL 1114	Physical Geology for Science and Engineering Majors	4
P E 2113	Statics and Dynamics	3
	Credit Hours	15

## Second Semester

P E 2213	Thermodynamics	3
P E 2153	Mechanics of Materials	3
P E 3022	Technical Communications	2
P E 3213	Reservoir Rock Properties	3
P E 3221	Rock Properties Laboratory	1
Approved Elective: Artistic Forms (Core IV) <sup>3</sup>		3
	Credit Hours	15

## Summer

P E 3222	Petroleum Engineering Practice II (Internship) <sup>4</sup>	2
	Credit Hours	2

## Junior

### First Semester

MATH 3113	Introduction to Ordinary Differential Equations	3
P E 3123	Petroleum Reservoir Fluids	3
P E 3223	Fluid Mechanics	3
P E 3313	Drilling I	3
P E 3712	Petroleum Economics	2
P E 3723	Numerical Methods for Engineering Computation	3
	Credit Hours	17

### Second Semester

GEOL 3003	Structural Geology and Stratigraphy for Petroleum Engineers	3
P E 3413	Production Engineering I	3
P E 3513	Reservoir Engineering I	3
P E 3813	Formation Evaluation with Well Logs	3
P E 4331	Drilling Engineering Laboratory	1
Approved Elective: Non-Western Culture (Core IV) <sup>3</sup>		3
	Credit Hours	16

## Senior

### First Semester

GPHY 3423	Introductory Petroleum Geology and Geophysics	3
P E 4323	Drilling II	3
P E 4521	Reservoir Fluid Mechanics Laboratory	1
P E 4712	Petroleum Project Evaluation	2
P E 4533	Reservoir Engineering II	3
Approved Elective: Western Civilization & Culture (Core IV) <sup>3</sup>		3
	Credit Hours	15

### Second Semester

P SC 1113	American Federal Government (Core III)	3
P E 4423	Production Engineering II	3
P E 4553	Integrated Reservoir Management (Capstone)	3
P E - Approved P E Elective <sup>4</sup>		3
	Credit Hours	12
	Total Credit Hours	127

<sup>1</sup> CHEM 1315 and CHEM 1415 can be substituted with CHEM 1335 (Fall only) and CHEM 1435 (Spring only), respectively.

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<sup>2</sup> The MATH 1823, MATH 2423, MATH 2433, and MATH 2443 sequence can be substituted for MATH 1914, MATH 2924, and MATH 2934.

<sup>3</sup> To be chosen from the University-Wide General Education Approved Course List. Three of these hours must be upper-division (3000-4000). See list in the Class Schedule.

<sup>4</sup> PE Elective: P E 4573, P E 4583, P E 4033, or any P E 5000-level course. A P E elective may be taken in place of P E 3222.