

PETROLEUM ENGINEERING, BACHELOR OF SCIENCE IN PETROLEUM ENGINEERING/ MASTER OF SCIENCE

Minimum Total Credit Hours: 151

Overall GPA - Combined and OU: 3.00

Major GPA - Combined and OU: 3.00

Curriculum GPA - Combined and OU: 3.00

Program Code: A764/F765

In order to progress in your curriculum, and as a specific graduation requirement, a grade of C or better is required in each course in the curriculum. Students must successfully complete prerequisite courses (with a minimum C grade) before proceeding to the next course.

Students may enter the accelerated program based on the undergraduate degree pattern offered in the year they first enrolled in the Oklahoma State System of Higher Education or later. Students must maintain a 3.0 GPA from the time of entering the accelerated program until graduation.

Students must take the GRE and apply for the MS program during the third year; minimum OU GPA and combined GPA of 3.0 is required. Students should submit an application to the School of Petroleum Engineering for the accelerated program during the fall semester of the Junior year. Students must also apply to the Graduate College during the spring semester of the Senior year to be admitted by that college to the MS program.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 1113	Principles of English Composition (Core I)	3
CHEM 1315	General Chemistry (Core II) ¹	5
MATH 1914	Differential and Integral Calculus I (Core I) ²	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) ³		3
Credit Hours		18
Second Semester		
ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
CHEM 1415	General Chemistry (Continued) ¹	5
MATH 2924	Differential and Integral Calculus II ²	4
PHYS 2514	General Physics for Engineering and Science Majors (Core II)	4
P E 2011	Introduction to Petroleum Engineering	1
Credit Hours		17
Sophomore		
First Semester		
MATH 2934	Differential and Integral Calculus III ²	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) ³		3
Credit Hours		15
Summer		
P E 3222	Petroleum Engineering Practice II (Internship) ⁴	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) ³		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) ³		3
Credit Hours		15
Second Semester		
P SC 1113	American Federal Government	3
P E 4423	Production Engineering II	3
P E 5553	Integrated Reservoir Management (Capstone) ⁵	3
P E Approved Graduate Elective ⁵		3

Approved Graduate Elective	3
Credit Hours	15
Summer	
Approved Math elective	3
Research Hours	2
Credit Hours	5
Fifth Year	
First Semester	
Approved Graduate Elective	3
Approved Graduate Elective	3
Approved Graduate Elective	3
Research Hours	2
Credit Hours	11
Second Semester	
Approved Graduate Elective	3
Research Hours	2
Credit Hours	5
Total Credit Hours	151

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

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

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

⁴ An approved PE elective may be taken in place of P E 3222.

⁵ Courses applied to both BS and MS degrees.

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.

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.