## REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN PETROLEUM ENGINEERING/ MASTER OF SCIENCE IN PETROLEUM ENGINEERING

(Bachelor of Science Portion of the Program Accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org)

## **MEWBOURNE COLLEGE OF EARTH AND ENERGY** — THE UNIVERSITY OF OKLAHOMA

For Students Entering the Oklahoma State System for Higher Education Summer 2016 through Spring 2017

## 

Petroleum Engineering/
A764
Bachelor of Science in

Petroleum Engineering/ Master of Science in Petroleum Engineering F765

OU encourages students to complete at least 32 hours of applicable coursework each year to have the opportunity to graduate in four years.				
Year	FIRST SEMESTER	Hours	SECOND SEMESTER	Hours
FRESHMAN	ENGL 1113, Prin. of English Composition (Core I) CHEM 1315, General Chemistry (Core II) *MATH 1914, Differential & Integral Calculus I (Core I) HIST 1483, U.S., 1492-1865, or 1493, U.S., 1865-Present (Core IV) †Approved Elective: Social Science (Core III)	3 5 4 3	ENGL 1213, Prin. of English Composition (Core I), or EXPO 1213, Expository Writing CHEM 1415, General Chemistry *MATH 2924, Differential & Integral Calculus II PHYS 2514, General Physics for Engineering & Science Majors (Core II) P E 2011, Intro. to Petroleum Engineering Systems	3 5 4 4
	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS	17
SOPHOMORE	*MATH 2934, Differential & Integral Calculus III PHYS 2524, General Physics for Engr. & Science Majors II14, Physical Geology P E 2113, Statics and Dynamics	4 4 4 3	P E 2213, Thermodynamics P E 2153, Mechanics of Materials P E 3022, Technical Communications P E 3213, Reservoir Rock Properties P E 3221, Rock Properties Lab †Approved Elective: Artistic Forms (Core IV)	3 3 2 3 1 3
S	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15
	SUMMER	*P E TOTAL	3222, Petroleum Engineering Practice II (Internship) CREDIT HOURS	2 2
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.				
JUNIOR	MATH P E 3113, Intro. to Ordinary Differential Equations P E 3123, Petroleum Reservoir Fluids P E 3223, Fluid Mechanics P E 3313, Drilling and Completions I P E 3712, Petroleum Economics P E 3723, Numerical Methods for Petroleum Engineering Computing	3 3 3 3 2 3	GEOL 3003, Structural Geology & Stratigraphy-Petr. Engr. P E 3413, Production Engineering I P E 3513, Reservoir Engineering I P E 3813, Formation Evaluation with Well Logs P E 4331, Drilling and Production Engineering Lab †Approved Elective: Non-Western Culture (Core IV)	3 3 3 3 1 3
	TOTAL CREDIT HOURS	17	TOTAL CREDIT HOURS	16
SENIOR	GPHY 3423, Intro. Petroleum Geology & Geophysics P E 4323, Drilling and Completions II P E 4521, Reservoir Fluid Mechanics Lab P E 4712, Petroleum Project Evaluation P E 4533, Reservoir Engineering II †Approved Elective: Western Civ. & Culture (Core IV)	3 3 1 2 3 3	P SC 1113, American Federal Government P E 4423, Production Engineering II  ◆P E 5553, Integrated Reservoir Management (capstone)  ◆P E Approved Graduate Elective  Approved Graduate Elective	3 3 3 3 3
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15
	SUMMER	Research I	Math elective Iours CREDIT HOURS	3 2 5
FIFTH YEAR	Approved Graduate Elective Approved Graduate Elective Approved Graduate Elective Research Hours  TOTAL CREDIT HOURS	3 3 3 2	Approved Graduate Elective Research Hours  TOTAL CREDIT HOURS	3 2
	TOTAL CREDIT HOURS	11	TOTAL CKEDIT HOURS	3

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.

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 list.

†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.

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.

•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.

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

\*Courses applied to both BS and MS degrees.

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