

**REQUIREMENTS FOR THE BACHELOR OF SCIENCE/MASTER OF BUSINESS ADMINISTRATION
MEWBOURNE COLLEGE OF EARTH AND ENERGY
THE UNIVERSITY OF OKLAHOMA**

Academic Year	General Requirements	Program
For Students Entering the Oklahoma State System for Higher Education Summer 2024 through Spring 2025	Minimum Total Credit Hours 165 Minimum Retention/Graduation Grade Point Averages: Overall - Combined and OU 3.00 Major - Combined and OU 3.00 Curriculum - Combined and OU 3.00	Petroleum Engineering A765/F140 Q513 Bachelor of Science/Master of Business Administration

OU encourages students to complete at least 33 hours of applicable coursework each year to have the opportunity to graduate in 5 years.

Minimum Total Credit Hours: 165

Overall GPA - Combined and OU: 3.00

Major GPA - Combined and OU: 3.00

Curriculum GPA - Combined and OU: 3.00

Program Code: A765/F140 Q513

General Education and College Requirements

Courses for fulfillment of General Education and college requirements must be from the approved General Education course list at <http://www.ou.edu/content/geden/courses.html>. **Courses graded P/NP will not apply**

UNIVERSITY-WIDE GENERAL EDUCATION (MINIMUM 40 HOURS) AND COLLEGE REQUIREMENTS

At least three hours of Upper-Division General Education coursework must be completed **outside the major**.

Code	Title	Credit Hours
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Core Area I: Symbolic and Oral Communication

<i>English Composition (6 hours)</i>		
ENGL 1113	Principles of English Composition	3
ENGL 1213	Principles of English Composition	3
or EXPO 1213	Expository Writing	

<i>Language (0-10 hours)</i>		
(0-10 hours in the same language) Students who have not completed two years of the same language in high school are required to take two college courses in the same language		
Beginning Course		0-5
Beginning Course, continued		0-5

<i>Mathematics (minimum 3 hours)</i>		
MATH 1914	Differential and Integral Calculus I ¹	3-4
or MATH 1823	Calculus and Analytic Geometry I	

Core Area II: Natural Science (minimum 7 hours, 2 courses)		
CHEM 1315	General Chemistry (Science with Lab) ¹	5
or CHEM 1335	General Chemistry I: Signature Course	
PHYS 2514	General Physics for Engineering and Science Majors ¹	4

Core Area III: Social Science (6 hours)		
P SC 1113	American Federal Government	3
Choose one General Education Social Science course		3

Core Area IV: Arts and Humanities		
<i>Artistic Forms (3 hours)</i>		
Choose one course from the General Education Artistic Forms list.		3

<i>Western Culture (6 hours)</i>		
HIST 1483	United States to 1865	3
or HIST 1493	United States, 1865 to the Present	
Choose one course from the General Education Western Culture list (Excluding HIST 1483 and HIST 1493)		3
<i>World Culture (3 hours)</i>		
Choose one course from the General Education World Culture list		3
Core Area V: First Year Experience (3 hours)		
CEE 1513	Towards Just and Responsible Energy Engineering (Core V-FYE) ²	3
Total Credit Hours		39-50

- ¹ Mewbourne College of Earth and Energy Sciences requirements that also satisfy University General Education requirements.
- ² Mewbourne School of Petroleum and Geological Engineering requirements that also satisfy University General Education requirements.

ADDITIONAL MEWBOURNE COLLEGE OF EARTH & ENERGY REQUIREMENT

Code	Title	Credit Hours
PHYS 2524	General Physics for Engineering and Science Majors	4
Total Credit Hours		4

Free Electives

Electives to bring total applicable hours to 172 including 40 upper-division hours.

Undergraduate Major Requirements

Bachelor of Science in Petroleum Engineering accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and the Petroleum and Similarly Named Engineering Programs Program Criteria.

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

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 GMAT and apply for the MBA program during the third year; minimum PE major GPA, 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 Price College of Business during the spring semester of the junior year to be admitted by that college to the MBA program.

Code	Title	Credit Hours
Petroleum Engineering Major Work		
P E 2113	Statics and Dynamics	3
P E 2153	Mechanics of Materials	3
P E 2213	Thermodynamics	3
P E 3021	Technical Communications	1
P E 3123	Petroleum Reservoir Fluids	3
P E 3213	Reservoir Rock Properties	3
P E 3220	Petroleum Engineering Internship ¹	0
P E 3221	Rock Properties Laboratory	1
P E 3223	Fluid Mechanics	3
P E 3313	Drilling I	3
P E 3413	Production Engineering I	3
P E 3513	Reservoir Engineering I	3
P E 3712	Petroleum Economics	2
P E 3723	Numerical Methods for Engineering Computation	3
P E 3813	Formation Evaluation with Well Logs	3
P E 4033	Oil, Gas and Environmental Law ²	3
P E 4323	Drilling II	3
or P E 4533	Reservoir Engineering II	
P E 4331	Drilling Engineering Laboratory	1
P E 4423	Production Engineering II	3
P E 5463	Data Analytics ²	3
P E 4521	Reservoir Fluid Mechanics Laboratory	1
P E 4711	Petroleum Project Evaluation	1
P E 5553	Integrated Reservoir Management ²	3
Total Credit Hours		55

¹ An approved P E elective may be taken in place of P E 3220 for 1 to 3 credit hours.

² Shared Hours: 9 hours may be applied to both the B.S. in Petroleum Engineering and the MBA degrees.

Major Support Requirements

Code	Title	Credit Hours
Math, Chemistry, Geology, and Geophysics Support Work		
MATH 2924	Differential and Integral Calculus II ¹	4
MATH 2934	Differential and Integral Calculus III ¹	4
MATH 3113	Introduction to Ordinary Differential Equations	3
C S 1213	Programming for Non-Majors with Python	3
GEOL 1114	Physical Geology for Science and Engineering Majors	4
GEOL 3003	Structural Geology and Stratigraphy for Petroleum Engineers	3
GPHY 3423	Introductory Petroleum Geology and Geophysics	3
Technical Electives ²		3
Total Credit Hours		27

¹ The MATH 1823, MATH 2423, MATH 2433, and MATH 2443 sequence can be substituted for MATH 1914, MATH 2924, and MATH 2934.

² Technical Electives to be selected from upper-division courses from the College of Earth and Energy and College of Engineering.

Graduate Requirements

A student who actively and satisfactorily participates in all Prelude activities will receive a grade of 'S' for B AD 5010. A student who does not satisfactorily participate in 75% of Prelude Week will be required to participate in a make-up session within the first two weeks of the semester. Failure to complete a make-up session will result in a grade of 'U' for B AD 5010, resulting in cancellation of the student's enrollment in the MBA program.

Code	Title	Credit Hours
Graduate Business Coursework		
B AD 5010	Foundations of MBA Success	0
B AD 5101	MBA - Professional Development	1
B AD 5102	Managerial Economics	2
B AD 5201	MBA - Professional Development II	1
B AD 5812	Global Business Experience	2
B AD 5822	Business Consulting Practicum	2
B AD 5832	Applied Field Project	2
B AD 5902	Strategic Management	2
ACCT 5202	Financial Accounting	2
FIN 5102	Financial Management	2
FIN 5112	Investments	2
FIN 5322	Financial Derivatives ¹	2
ENGB 5162	Energy Corporate Finance ¹	2
ENGB 5152	Energy Accounting and Regulations ¹	2
ENGB 5172	Energy Assets and Commodities: Financial Instruments, Pricing and Trading ¹	2
ENGB 5182	Enterprise Valuation, Mergers and Acquisitions, and Corporate Restructuring ¹	2
L S 5802	Business Ethics/Legal	2
MGT 5702	Organizational Behavior	2

MIT 5602	Management Information Systems	2
MKT 5402	Marketing Management	2
Graduate Business Elective		1
Choose one of the following:		2
ACCT 5212	Managerial Accounting	
B AD 5182	Quantitative Analysis II	
ENT 5102	Entrepreneurship & Innovation	
Total Credit Hours		39

¹ Counts toward fulfillment of the MBA Energy Specialization (10 hours: ENGB 5152, ENGB 5162, ENGB 5172, ENGB 5182; FIN 5322).

More information in the catalog: (<http://ou-public.courseleaf.com/mewbourne-earth-energy/mewbourne-petroleum-geological-engineering/petroleum-engineering-bachelor-science-master-business-administration/>).

Suggested Semester Plan of Study

Bachelor of Science in Petroleum Engineering accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and the Petroleum and Similarly Named Engineering Programs Program Criteria.

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 must take the GMAT and apply for the MBA program during the third year; minimum PE major GPA, 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 Price College of Business during the spring semester of the junior year to be admitted by that college to the MBA program.

Year	FIRST SEMESTER		Hours	SECOND SEMESTER		Hours	
FRESHMAN	ENGL 1113	Principles of English Composition (Core I)	3	ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3	
	CHEM 1315	General Chemistry (Core II)	5	MATH 2924	Differential and Integral Calculus II ¹	4	
	MATH 1914	Differential and Integral Calculus I (Core I) ¹	4	PHYS 2514	General Physics for Engineering and Science Majors (Core II)	4	
	HIST 1483 or HIST 1493	United States to 1865 (Core IV) or United States, 1865 to the Present	3	P SC 1113	American Federal Government (Core III)	3	
	CEE 1513	Towards Just and Responsible Energy Engineering (Core V-FYE)	3		Approved Elective: Western Culture (Core IV) ²	3	
	CREDIT HOURS		18	CREDIT HOURS		17	
SOPHOMORE	MATH 2934	Differential and Integral Calculus III ¹	4	P E 2213	Thermodynamics	3	
	PHYS 2524	General Physics for Engineering and Science Majors	4	P E 3021	Technical Communications	1	
	GEOL 1114	Physical Geology for Science and Engineering Majors	4	P E 3213	Reservoir Rock Properties	3	
	P E 2113	Statics and Dynamics	3	P E 3221	Rock Properties Laboratory	1	
		Approved Elective: Artistic Forms (Core IV) ²	3	C S 1213	Programming for Non-Majors with Python	3	
				MATH 3113	Introduction to Ordinary Differential Equations	3	
				GEOL 3003	Structural Geology and Stratigraphy for Petroleum Engineers	3	
	CREDIT HOURS		18	CREDIT HOURS		17	
	SUMMER						
	P E 3220	Petroleum Engineering Internship ³	0				
CREDIT HOURS		0					
JUNIOR	P E 3123	Petroleum Reservoir Fluids	3	P E 2153	Mechanics of Materials	3	
	P E 3223	Fluid Mechanics	3	P E 3413	Production Engineering I	3	
	P E 3313	Drilling I	3	P E 3513	Reservoir Engineering I	3	
	P E 3712	Petroleum Economics	2	P E 3813	Formation Evaluation with Well Logs	3	
	P E 3723	Numerical Methods for Engineering Computation	3	P E 4331	Drilling Engineering Laboratory	1	
	P E 4711	Petroleum Project Evaluation	1	GPHY 3423	Introductory Petroleum Geology and Geophysics	3	
		Social Science (Core III) ²	3				
CREDIT HOURS		18	CREDIT HOURS		16		
SENIOR	ACCT 5202	Financial Accounting	2	B AD 5201	MBA - Professional Development II	1	
	B AD 5010	Foundations of MBA Success	0	B AD 5812	Global Business Experience	2	
	B AD 5101	MBA - Professional Development	1	ENGB 5162	Energy Corporate Finance ⁶	2	
	FIN 5102	Financial Management	2	FIN 5112	Investments	2	
	P E 4033	Oil, Gas and Environmental Law ⁴	3	FIN 5322	Financial Derivatives ⁶	2	
	P E 4323 or P E 4533	Drilling II or Reservoir Engineering II	3	P E 5463	Data Analytics ⁴	3	
	P E 4423	Production Engineering II	3	P E 5553	Integrated Reservoir Management ⁴	3	
	P E 4521	Reservoir Fluid Mechanics Laboratory	1		Technical Elective ⁵	3	
		Approved Elective: World Culture (Core IV)	3				
CREDIT HOURS		18	CREDIT HOURS		18		
FIFTH YEAR	B AD 5102	Managerial Economics	2	B AD 5822	Business Consulting Practicum	2	
	B AD 5832	Applied Field Project	2	B AD 5902	Strategic Management	2	
	ENGB 5152	Energy Accounting and Regulations ⁶	2	L S 5802	Business Ethics/Legal	2	
	ENGB 5172	Energy Assets and Commodities: Financial Instruments, Pricing and Trading ⁶	2	MKT 5402	Marketing Management	2	
	ENGB 5182	Enterprise Valuation, Mergers and Acquisitions, and Corporate Restructuring ⁶	2		Graduate Business Elective	1	
	MGT 5702	Organizational Behavior	2		Choose one of the following:	2	
	MIT 5602	Management Information Systems	2	ACCT 5212	Managerial Accounting		
				B AD 5182	Quantitative Analysis II		
				ENT 5102	Entrepreneurship & Innovation		
	CREDIT HOURS		14	CREDIT HOURS		11	

¹ The MATH 1823, MATH 2423, MATH 2433, and MATH 2443 sequence can be substituted for MATH 1914, MATH 2924, and MATH 2934.

² To be chosen from the University-Wide General Education Approved Course List. Three of these nine hours must be upper-division (3000-4000). See list in the Class Schedule.

³ An approved P E elective may be taken in place of P E 3220 for 1 to 3 credit hours.

⁴ Shared Hours: 9 hours may be applied to both the B.S. in Petroleum Engineering and the MBA degrees.

⁵ Technical Electives to be selected from upper-division courses from the College of Earth and Energy and College of Engineering.

⁶ Counts toward fulfillment of the MBA Energy Specialization (10 hours: ENGB 5152, ENGB 5162, ENGB 5172, ENGB 5182; FIN 5322).

6 Requirements for the Bachelor of Science/Master of Business Administration

- Courses designated as Core I, II, III, IV, or V 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 language are required; this may be satisfied by successful completion of 2 years in a single language in high school. Students who must take language at the University will have an additional 6-10 hours of coursework.