

Bachelor of Science in Petroleum Engineering

Required 129 credits (36 of which must be numbered 300 or above) including:

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

II. Petroleum Engineering required courses:

Code	Title	Credits
PTRE 201	Introduction to Petroleum Engineering *	3
PTRE 301	Reservoir Rock Properties *	3
PTRE 311	Petroleum Fluid Properties *	3
PTRE 361	Petroleum Engineering Laboratory I *	1
PTRE 401	Well Logging	3
PTRE 405	Petroleum Eng. Economy and Law *	3
PTRE 411	Drilling Engineering *	3
PTRE 421	Production Engineering *	3
PTRE 431	Reservoir Engineering *	3
PTRE 445	Well Testing	3
PTRE 451	Advanced Drilling Engineering *	3
PTRE 462	Petroleum Engineering Laboratory II *	1
PTRE 465	Petroleum Geomechanics *	3
PTRE 471	Numerical Reservoir Simulation *	3
PTRE 475	Well Completions *	3
PTRE 484	Research Design *	3
PTRE 485	Senior Design	3
Total Credits		47

III. Program Required Electives

Code	Title	Credits
Technical Electives		6
PTRE 461	Natural Gas Engineering *	3
PTRE 493	Selected Topics in Petroleum Engineering *	1-4
ENGR 490	Topics in Engineering *	1-3
GEOL 330	Structural Geology *	3
GEOL 411		
GEOL 414	Applied Geophysics *	3
GEOE 417	Hydrogeology *	3

IV. College of Engineering and Mines Requirements:

Code	Title	Credits
ENGR 200	Computer Applications in Engineering *	2
ENGR 201	Statics *	3
ENGR 203	Mechanics of Materials *	3
ENGR 340	Professional Integrity in Engineering *	3
GEOE 203	Earth Dynamics *	3
GEOE 203L	Earth Dynamics Laboratory *	1
GEOL 407	Petroleum Geology *	3
CHE 315	Engineering Statistics and Design of Experiments *	3
OR		
MATH 321	Applied Statistical Methods *	
ME 306	Fluid Mechanics *	3
ME 341	Thermodynamics *	3
Total Credits		27

V. Requirements outside of the College of Engineering and Mines:

Code	Title	Credits
CHEM 121	General Chemistry I *	3
AND		
CHEM 121L	General Chemistry I Laboratory *	1
CHEM 122 & 122L	General Chemistry II and General Chemistry II Laboratory	4
MATH 165	Calculus I *	4
MATH 166	Calculus II *	4
MATH 265	Calculus III *	4
MATH 266	Elementary Differential Equations *	3
PHYS 251	University Physics I *	4
OR		
PHYS 251C	University Physics I *	
AND		
PHYS 251CL	University Physics I Lab *	
PHYS 252 or PHYS 252C & 252CL	University Physics II and University Physics II Lab	4
Total Credits		31

*Courses with asterisk must be completed with a "C" or higher.

Students need to meet a minimum of 2.0 GPA within the College of Engineering and Mines.

Students must ensure all appropriate pre-requisites are met prior to registering for all courses in the curriculum.