

# B.S., PETROLEUM ENGINEERING

## Minimum Requirements for Degree: 133 credits

Students must earn a C- grade or better in each course.

Code	Title	Credits
<b>General University Requirements</b>		
Complete the general university requirements. ( <a href="http://catalog.uaf.edu/bachelors">http://catalog.uaf.edu/bachelors</a> )		
<b>General Education Requirements</b>		
Complete the general education requirements. ( <a href="http://catalog.uaf.edu/bachelors/general-education-requirements">http://catalog.uaf.edu/bachelors/general-education-requirements</a> )		
As part of the general education requirements, complete:		
CHEM F105X	General Chemistry I	
CHEM F106X	General Chemistry II	
MATH F251X	Calculus I	
<b>B.S. Degree Requirements</b>		
Complete the B.S. degree requirements. ( <a href="http://catalog.uaf.edu/bachelors/summary-of-bachelors-degree-reqs/#bachelorofsciencetext">http://catalog.uaf.edu/bachelors/summary-of-bachelors-degree-reqs/#bachelorofsciencetext</a> )		
As part of the B.S. degree requirements, complete:		
LS F101X	Library Information and Research	
MATH F252X	Calculus II	
PHYS F211X	General Physics I	
PHYS F212X	General Physics II	
<b>Program Requirements</b>		
ES F201	Computer Techniques	3
ES F208	Mechanics	4
ES F331	Mechanics of Materials	3
ES F341	Fluid Mechanics	4
ES F346	Introduction to Thermodynamics	3
GE F261 or GEOS F101X	General Geology for Engineers The Dynamic Earth	3-4
PETE F101	Fundamentals of Petroleum, Drilling and Production	3
PETE F301	Reservoir Rock and Fluid Properties	4
PETE F302	Well Logging	3
PETE F303	Reservoir Rock and Fluid Properties Laboratory	1
PETE/GEOS F370	Sedimentology and Structural Geology for Petroleum Engineers	4
PETE F407	Petroleum Production Engineering	3
PETE F411	Drilling Fluids Laboratory	1
PETE F421	Applied Reservoir Characterization	3
PETE F426	Drilling Engineering	3
PETE F431	Natural Gas Engineering	2
PETE F456	Petroleum Evaluation and Economic Decisions	3
PETE F466	Petroleum Recovery Methods	3
PETE F476	Petroleum Reservoir Engineering	3
PETE F478	Well Test Analysis	2

PETE F481	Well Completions and Stimulation Design	3
PETE F487A	Petroleum Project Design <sup>1,2</sup>	1
PETE F487B	Petroleum Project Design <sup>2</sup>	1
PETE F489	Reservoir Simulation	2
Engineering elective <sup>3</sup>		3
Technical elective <sup>4</sup>		3

### Program Requirements

MATH F253X	Calculus III	4
MATH F302	Differential Equations	3
MATH F310 or ES F301	Numerical Analysis Engineering Analysis	3

### Fundamentals of Engineering (FE) Examination

Complete the Fundamentals of Engineering (FE) examination administered by the State of Alaska.

- <sup>1</sup> PETE F487A is prerequisite for PETE F487B.
- <sup>2</sup> Fulfills the baccalaureate capstone requirement.
- <sup>3</sup> As approved by advisor (e.g. ME F416 or ES F307).
- <sup>4</sup> As approved by advisor (e.g. CE F603).