

2007-08 CATALOG

PETROLEUM ENGINEERING

B.S. Degree Requirements
134 Credits

GENERAL REQUIREMENTS

COMMUNICATIONS:- (9)

Engl 111X (3)____
Engl 211X/213X (3)____
Comm 131X/141X (3)____

PERSPECTIVES ON THE HUMAN CONDITION:- (18-22)

Complete the 6 courses listed **OR** 4 of those listed plus 2 semester length courses in a single AK Native or other non-English language or 3 semester length courses (9 credits) in American Sign Language.

Anth 100X/Soc 100X (3)____
Econ/PS 100X (3)____
Hist 100X (3)____
Art/Mus/Thr 200X or
Hum 201X or Ans 202X (3)____
Engl/FL 200X (3)____
BA 323X or Comm 300X or Just 300X or Nrm 303X or
Phil 322X or PS 300X (3)____
Language option as listed above:
_____() _____() _____()_____

MATHEMATICS:- (18)

Math 200X (4)____ Math 202X (4)____
Math 201X (4)____ Math 302 (3)____
Math 310 (3)____

NATURAL SCIENCE:- (16)

Chem 105X (4)____ Chem 106X (4)____
Phys 211X (4)____ Phys 212X (4)____

LIBRARY & INFO SKILLS:- (1)

LS 101X (1)____

UPPER DIVISION CREDITS:- (39)

Transfer Credits: _____
UAF Credits (24)*: _____
TOTAL TO DATE: _____
TO BE COMPLETED: _____

*A minimum of 24 UAF credits

COMPLETE 2 DESIGNATED (W) COURSES AND
1 DESIGNATED (O) COURSE OR 2 COURSES
DESIGNATED (O/2) AT THE
UPPER DIVISION LEVEL:

_____(W) _____(W)
_____(O) OR _____(O/2) _____(O/2)

*Designates only grades of "C" or better may be used to fulfill this requirement.

*MAJOR REQUIREMENTS

1. Complete the following:*- (42)

Pete 103 (1)____
Pete 104 (1)____
Pete 205 (1)____
Pete 206 (1)____
Pete 301 (4)____
Pete 302 (3)____
Pete 303 (1)____(W)
Pete 407 (3)____
Pete 411 (1)____(W)
Pete 421 (3)____
Pete 426 (3)____
Pete 431 (2)____
Pete 456 (3)____
Pete 466 (3)____
Pete 476 (3)____
Pete 478 (2)____
Pete 481 (3)____(W)
Pete 487A (1)____+
Pete 487B (1)____(W,O)
Pete 489 (2)____

+Pete 487A is a prerequisite for Pete 487B.

Must take both courses to meet the Oral communication and Writing intensive requirements.

2. Complete the following:*- (17)

E.S. 201 (3)____
E.S. 208 (4)____
E.S. 331 (3)____
E.S. 341 (4)____
E.S. 346 (3)____

3. Complete 3 credits of Engineering elective (eg. ME 416/ES 307):*

_____(3)_____

4. Complete 3 credits of technical engineering elective (eg. CE 603):*

_____(3)_____

5. Complete the following:- (7-8)*

A. Geos 101X (4)____ or G.E. 261(3)____
B. Geos 370 (4)____

6. Complete the Fundamentals of Engineering Exam: _____

Credits for core/general requirements:	62
Credits required for major:	<u>72-73</u>
Total credits required for degree:	134

BACHELOR OF SCIENCE IN PETROLEUM ENGINEERING

First Year: Fall

CHEM 105X-General Chemistry	4
ENGL 111X-Intro to Acad Writing	3
LS 101X	1
MATH 200X-Calculus I	4
PETE 103-Survey of the Energy Industry	1
Perspectives Core (1 of 6)	3
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First Year: Spring

CHEM 106X-General Chemistry II	4
COMM 131X or 141X	3
ES 201-Computer Techniques	3
GE 261-Geology for Engineers	3
MATH 201X-Calculus II	4
PETE 104- Fundamentals of Petroleum	1
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Second Year: Fall

ENGL 211X/213X-Academic Writing	3
MATH 202X-Calculus III	4
PETE 205-Intro to Petr. Drilling & Prod.	1
PHYS 211X-General Physics I	4
Perspectives Core (2 of 6)	3
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Second Year: Spring

ES 208-Mechanics	4
ES 346-Basic Thermodynamics	3
MATH 302-Differential Equations	3
PETE 206- Intro to Petroleum Prod.	1
PHYS 212X-General Physics	4
Perspectives Core (3 of 6)	3
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Third Year: Fall

ES 331-Mechanics of Materials	3
ES 341-Fluid Mechanics	4
MATH 310-Numerical Analysis	3
PETE 301-Reservoir Rock & Fluid Prop.	4
Perspectives Core (4 of 6)	3
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Third Year: Spring

GEOS 370-Struct. Geol. for Petr. Engr.	4
PETE 302-Well Logging	3
PETE 303-Reservoir Rock/Fluid Prop. Lab	1
PETE 411-Drilling Fluids Laboratory	1
PETE 426-Drilling Engineering	3
PETE 476-Reservoir Engineering	3
Perspectives Core (5 of 6)	3
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Fourth Year: Fall

PETE 407-Production Engineering	3
PETE 431-Natural Gas Engineering	2
PETE 466-Petroleum Recovery Methods	3
PETE 481-Well Completions/Stimul. Des	3
PETE 487-Petroleum Project Design	2
Perspectives Core (6 of 6)	3
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Fourth Year: Spring

PETE 421-Reservoir Characterization	3
PETE 456-Pet. Eval. and Econ. Dec	3
PETE 478-Well Test Analysis	2
PETE 489-Reservoir Simulation	2
Engineering Elective**	3
Technical Elective***	3
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**As approved by advisor (e.g. ME 416 or ES 307).

***As approved by advisor (e.g. CE 603).

NOTE: GEOS 101X may be taken in a fall semester in place of GE 261.