PETROLEUM ENGINEERING
B.S. Degree Requirements
133 Credits

GENERAL REQUIREMENTS

COMMUNICATION: (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)

MATHEMATICS: (18)
MATH 251X (4)
MATH 302 (3)
MATH 310 (3)
OR ES 301 (3)
ES 331 (3)
CHEM 105X (4)
CHEM 106X (4)
PHYS 211X (4)
PHYS 212X (4)

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 (minimum 24): _____

TOTAL TO DATE: _____
TO BE COMPLETED: _____

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)

*MAJOR REQUIREMENTS

1. Complete the following: (41)
PETE 101 (3)
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)
ES 201 (3)
ES 208 (4)
ES 331 (3)
ES 341 (4)
ES 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 GE 261(3)
B. GEOS 370 (4)

6. Complete the Fundamentals of
Engineering Exam:

Credits for core/general requirements: 62
Credits required for major: 71-72
Total credits required for degree: 133
# Bachelor of Science in Petroleum Engineering (Degree Plan)

## First Year: Fall
- CHEM 105X - General Chemistry: 4 credits
- ENGL 111X - Intro to Acad Writing: 3 credits
- MATH 251X - Calculus I: 4 credits
- PETE 101 - Fundamentals of Petr. Drilling & Production: 3 credits
- Perspectives Core (1 of 6): 3 credits
- **Total credits:** 17

## First Year: Spring
- CHEM 106X - General Chemistry II: 4 credits
- COMM 131X or 141X: 3 credits
- ES 201 - Computer Techniques: 3 credits
- GE 261 - Geology for Engineers: 3 credits
- MATH 252X - Calculus II: 4 credits
- **Total credits:** 17

## Second Year: Fall
- ENGL 211X/213X - Academic Writing: 3 credits
- LS 101X: 1 credit
- MATH 253X - Calculus III: 4 credits
- PHYS 211X - General Physics I: 4 credits
- Perspectives Core (2 of 6): 3 credits
- **Total credits:** 15

## Second Year: Spring
- ES 208X - Mechanics: 4 credits
- PHYS 212X - General Physics: 4 credits
- MATH 302 - Differential Equations: 3 credits
- Perspectives Core (3 of 6): 3 credits
- **Total credits:** 17

## Third Year: Fall
- ES 331 - Mechanics of Materials: 3 credits
- ES 341 - Fluid Mechanics: 4 credits
- GEOS 370 - Structural Geology for Petr. Engr.: 4 credits
- PETE 301 - Reservoir Rock & Fluid Prop.: 4 credits
- Perspectives Core (4 of 6): 3 credits
- **Total credits:** 18

## Third Year: Spring
- ES 301 - Engineering Analysis: 3 credits
- PETE 302 - Well Logging: 3 credits
- PETE 303 - Reservoir Rock/Fluid Prop. Lab: 1 credit
- PETE 411 - Drilling Fluids Laboratory: 1 credit
- PETE 426 - Drilling Engineering: 3 credits
- PETE 476 - Reservoir Engineering: 3 credits
- Perspectives Core (5 of 6): 3 credits
- **Total credits:** 17

## Fourth Year: Fall
- PETE 407 - Production Engineering: 3 credits
- PETE 431 - Natural Gas Engineering: 2 credits
- PETE 466 - Petroleum Recovery Methods: 3 credits
- PETE 481 - Well Completions/Stimul. Des: 3 credits
- PETE 487A - Petroleum Project Design: 1 credit
- Perspectives Core (6 of 6): 3 credits
- **Total credits:** 15

## Fourth Year: Spring
- PETE 421 - Reservoir Characterization: 3 credits
- PETE 456 - Pet. Eval. and Econ. Dec: 3 credits
- PETE 478 - Well Test Analysis: 2 credits
- PETE 487B - Petroleum Project Design: 1 credit
- PETE 489 - Reservoir Simulation: 2 credits
- Engineering Elective**: 3 credits
- Technical Elective***: 3 credits
- **Total credits:** 17

**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.*

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Abhijit Dandekar, February 8, 2013

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