PETROLEUM ENGINEERING B.S.

Program Requirements
< Back to Department (http://catalog.uaf.edu/academic-departments/petroleum-engineering/)

Minimum Requirements for Petroleum Engineering, B.S.: 131 credits
Students must earn a C- grade or better in each course.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>General University Requirements</strong></td>
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<tr>
<td>Complete the general university requirements.</td>
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<td>(<a href="http://catalog.uaf.edu/bachelors/#gurbachelorsdegreetext">http://catalog.uaf.edu/bachelors/#gurbachelorsdegreetext</a>)</td>
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<td><strong>General Education Requirements</strong></td>
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<tr>
<td>CHEM F105X</td>
<td>General Chemistry I</td>
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<tr>
<td>CHEM F106X</td>
<td>General Chemistry II</td>
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<tr>
<td>MATH F251X</td>
<td>Calculus I</td>
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<td><strong>B.S. Degree Requirements</strong></td>
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<td>LS F101X</td>
<td>Library Information and Research</td>
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<tr>
<td>MATH F252X</td>
<td>Calculus II</td>
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<tr>
<td>PHYS F211X</td>
<td>General Physics I</td>
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<td>PHYS F212X</td>
<td>General Physics II</td>
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<td><strong>Petroleum Engineering Program Requirements</strong></td>
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<td>Complete the following:</td>
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<tr>
<td>ES F201</td>
<td>Computer Techniques</td>
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<tr>
<td>ES F208</td>
<td>Mechanics</td>
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<tr>
<td>ES F331</td>
<td>Mechanics of Materials</td>
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<tr>
<td>ES F341</td>
<td>Fluid Mechanics</td>
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<tr>
<td>ES F346</td>
<td>Introduction to Thermodynamics</td>
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<tr>
<td>GE F261</td>
<td>General Geology for Engineers</td>
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<tr>
<td>or GEOS F101X</td>
<td>The Dynamic Earth</td>
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<tr>
<td>MATH F253X</td>
<td>Calculus III</td>
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<td>MATH F302</td>
<td>Differential Equations</td>
<td>3</td>
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<tr>
<td>MATH F426</td>
<td>Numerical Analysis</td>
<td>3</td>
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<tr>
<td>or ES F301</td>
<td>Engineering Analysis</td>
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<tr>
<td>PETE F101</td>
<td>Fundamentals of Petroleum, Drilling and Production</td>
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<tr>
<td>PETE F201</td>
<td>Future Trends in the Oil and Gas Industry</td>
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<td>PETE F301</td>
<td>Reservoir Rock and Fluid Properties</td>
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<td>PETE F302</td>
<td>Well Logging</td>
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<td>PETE F303</td>
<td>Reservoir Rock and Fluid Properties Laboratory</td>
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<td>PETE/GEOS F370</td>
<td>Sedimentology and Structural Geology for Petroleum Engineers</td>
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<td>PETE F407</td>
<td>Petroleum Production Engineering</td>
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<td>PETE F411</td>
<td>Drilling Fluids Laboratory</td>
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<td>PETE F421</td>
<td>Reservoir Characterization</td>
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<td>PETE F426</td>
<td>Drilling Engineering</td>
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<td>PETE F431</td>
<td>Natural Gas Engineering</td>
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<td>PETE F456</td>
<td>Petroleum Evaluation and Economic Decisions</td>
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<td>PETE F469</td>
<td>Enhanced Oil Recovery and Reservoir Simulation</td>
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<td>PETE F476</td>
<td>Petroleum Reservoir Engineering</td>
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<td>PETE F478</td>
<td>Well Test Analysis</td>
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<td>PETE F481</td>
<td>Well Completions and Stimulation Design</td>
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<tr>
<td>PETE F487A</td>
<td>Petroleum Project Design 1,2</td>
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<tr>
<td>PETE F487B</td>
<td>Petroleum Project Design</td>
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<tr>
<td>STAT F300</td>
<td>Statistics</td>
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<td>Complete one of the following approved electives:</td>
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<tr>
<td>CE F424</td>
<td>Permafrost Engineering</td>
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<td>ES F307</td>
<td>Elements of Electrical Engineering</td>
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<td>ESM F422</td>
<td>Engineering Decisions</td>
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<td>ME F441</td>
<td>Heat and Mass Transfer</td>
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<td>ME F458</td>
<td>Energy and the Environment</td>
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<tr>
<td><strong>Fundamentals of Engineering (FE) Examination</strong></td>
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<td>Fundamentals of Engineering (FE) examination administered by the State of Alaska.</td>
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Total Credits 131

1 PETE F487A is prerequisite for PETE F487B.
2 Fulfills the baccalaureate capstone requirement.