B.S. Degree Requirements

134 Credits

**GENERAL REQUIREMENTS**

**COMMUNICATIONS:** (-9)
- Engl 111X (3)
- Engl 211X or 213X (3)
- Comm 131X or 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:**
- ______( )___
- ______( )___
- ______( )___
- ______(3)____
- ______(3)____

**MATHEMATICS:** (-18)
- Math 200X (4)
- Math 202X (4)
- Math 201X (4)
- Math 302 (3)
- STAT 200 (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)

**MAJOR REQUIREMENTS**

A. Complete the following: (-52)
- G.E. 101 (1)
- G.E. 261 (3)
- G.E. 365 (3)
- G.E. 375 (3)
- G.E. 381 (2) (W)
- G.E. 382 (4) (W)
- G.E. 405 (4)
- G.E. 420 (3)
- G.E. 471 (3)
- G.E. 480 (3) (W)
- Geos 213 (4)
- Geos 214 (4)
- Geos 332 (3)
- Geos 421 (3)
- Min 202 (3)
- Min 370 (3)
- Min 408 (3)

B. Complete 6 credits of approved Technical elective:
- ______(3)___
- ______(3)___

C. Complete the following
- Engineering Science courses: (-14)
- E.S. 201 (3)
- E.S. 208 (4)
- E.S. 331 (3)
- E.S. 341 (4)

D. Must take the Fundamentals
- Of Engineering Exam.
- EXAM TAKEN: ______________

Must earn 'C' grades or better in A, B and C areas.

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

Credits for core/general requirements: 62
Credits required for major: 72
Total credits required for degree: 134

(geoe) 9/22/2006
**BACHELOR OF SCIENCE IN GEOLOGICAL ENGINEERING**

<table>
<thead>
<tr>
<th>First Year: Fall</th>
<th>First Year: Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE 101-Intro to Geological Engineering</td>
<td>COMM 131X or 141X</td>
</tr>
<tr>
<td>ENGL 111X-Meth.of Written Comm.</td>
<td>MATH 201X-Calculus II</td>
</tr>
<tr>
<td>MATH 200X-Calculus I</td>
<td>GE 261-General Geology for Engineers</td>
</tr>
<tr>
<td>CHEM 105X-General Chemistry</td>
<td>CHEM 106X-General Chemistry</td>
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<tr>
<td>Perspectives Core (1 of 6)</td>
<td>LS 101X-Library Information &amp; Research</td>
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<td><strong>15</strong></td>
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<thead>
<tr>
<th>Second Year: Fall</th>
<th>Second Year: Spring</th>
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</thead>
<tbody>
<tr>
<td>MATH 202X-Calculus III</td>
<td>ES 201-Computer Techniques</td>
</tr>
<tr>
<td>GEOS 213-Mineralogy</td>
<td>ES 208-Mechanics</td>
</tr>
<tr>
<td>PHYS 211X-General Physics</td>
<td>PHYS 212X-General Physics</td>
</tr>
<tr>
<td>ENGL 211X/213X-Intermediate Exposition</td>
<td>GEOS 214-Petrology and Petrography</td>
</tr>
<tr>
<td>MIN 202-Mine Surveying</td>
<td>Perspectives Core (2 of 6)</td>
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</tbody>
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<thead>
<tr>
<th>Third Year: Fall</th>
<th>Third Year: Spring</th>
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<tbody>
<tr>
<td>ES 331-Mechanics of Materials</td>
<td>ES 341-Fluid Mechanics</td>
</tr>
<tr>
<td>GE 365-Geological Materials Engineering</td>
<td>GEOS 332-Ore Deposits and Structure</td>
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<tr>
<td>GE 375-Princ of Engr Geol &amp;Terrain Anal</td>
<td>MATH 302-Differential Equations</td>
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<tr>
<td>GEOS 421-Sedimentology</td>
<td>MIN 370-Rock Mechanics</td>
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<td>STAT 200-Elem. Probability &amp; Statistics</td>
<td>Perspectives Core (3 of 6)</td>
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<tr>
<th>Summer: After Third Year</th>
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<tbody>
<tr>
<td>GE 381- Field Methods and Applied Design I</td>
<td>2</td>
</tr>
<tr>
<td>GE 382- Field Methods and Applied Design II</td>
<td>4</td>
</tr>
<tr>
<td><strong>6</strong></td>
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<tr>
<th>Fourth Year: Fall</th>
<th>Fourth Year: Spring</th>
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</thead>
<tbody>
<tr>
<td>GE 405-Exploration Geophysics</td>
<td>GE 420-Subsurface Hydrology</td>
</tr>
<tr>
<td>GE 471-Remote Sensing For Engineers</td>
<td>GE 480-Senior Design</td>
</tr>
<tr>
<td>Technical Electives</td>
<td>MIN 408-Mineral Valuation &amp; Economics</td>
</tr>
<tr>
<td>Perspectives Core (4 of 6)</td>
<td>Technical Electives</td>
</tr>
<tr>
<td>Perspectives Core (5 of 6)</td>
<td>Perspectives Core (6 of 6)</td>
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**Note:**

Students must plan their elective courses in consultation with their mining engineering faculty advisor. Technical electives are selected from the list of the approved technical electives for mining engineering program and other programs course listing. All elective courses must be approved by the department head.

(geoe) 9/22/2006