**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:
_________()___  __________()___  __________()___

**MATHEMATICS:** (15)
- MATH 200X (4)
- MATH 201X (4)
- MATH 302 (3)

**NATURAL SCIENCE:** (16)
- CHEM 105X (4)
- CHEM 106X (4)
- PHYS 211X (4)
- PHYS 212X (4)

**LIBRARY & INFO SKILLS:** (1)
- LS 101X (1)

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)

**UPPER DIVISION CREDITS:** (39)

Transfer Credits
- UAF Credits (minimum 24)
- TOTAL TO DATE: 
- TO BE COMPLETED: 

*Designates only grades of "C" or better may be used to fulfill this requirement. (A & B areas)

**MAJOR REQUIREMENTS**

A. Complete the following: (67)
- MIN 103 (1)
- MIN 104 (1)
- MIN 202 (3)
- MIN 225 (2)
- MIN 226 (2)
- MIN 301 (3)
- MIN 302 (3)
- MIN 313 (3)
- MIN 370 (3)
- MIN 407 (3) (W)
- MIN 408 (3) (O)
- MIN 409 (3)
- MIN 443 (3)
- MIN 454 (3)
- MIN 482 (3)
- MIN 484 (2)
- MIN 485 (0) (FE exam)
- MIN 489 (1) +
- MIN 490 (2) (W)+
- ES 208 (4)
- ES 307 (3)
- ES 331 (3)
- ES 341 (4)
- ES 346 (3)
- GE 261 (3)
- GEOS 262 (3)
- GEOS 332 (3)

* Must complete both courses to earn writing intensive (W) credit.

B. Complete 6 credits of technical elective from the following:

1. Complete 3 credits from the following:
   - GE 440 (3)
   - MIN 401 (2)
   - MIN 415 (3)
   - MIN 447 (3)
   - MIN 472 (3)
   - MIN 481 (3)
   - MIN 646 (3)
   - GE 603 (3)

2. Complete 3 credits of technical elective approved by the Dept. Head:

Credits for core/general requirements: 59
Credits required for major: 73
Total credits required for degree: 132
# BACHELOR OF SCIENCE IN MINING ENGINEERING

## First Year: Fall
- ENGL 111X-Methods of Written Comm. 3
- MATH 200X-Calculus 4
- Min 103-Intro Mining Engineering 1
- CHEM 105x-General Chemistry 4
- Perspectives on the Human Condition 3
- MIN 104-Mining Safety & Operations Lab 1

## First Year: Spring
- COMM 131X or 141X 3
- MATH 201X-Calculus 4
- GE 261-General Geology for Engineers 3
- CHEM 106X-General Chemistry 3
- Min 106-Mining Operations 1
- LS 101X-Library Info & Research 1

## Second Year: Fall
- PHYS 211X-General Physics 4
- MATH 202X-Calculus 4
- GEOS 262-Rocks and Minerals* 3
- MIN 202-Mine Surveying 3
- Perspectives on the Human Condition 3

## Second Year: Spring
- PHYS 212X-General Physics 4
- MATH 302-Differential Equations 3
- ENGL 211X or 213X-Intermed. Exposition 3
- ES 208-Mechanics 4
- ES 201-Computer Techniques 3
- MIN 206-Mining Operations II 1

## Third Year: Fall
- ES 307-Elements of Electrical Engr. 3
- ES 331-Mechanics of Materials 3
- ES 341-Fluid Mechanics 4
- MIN 313-Intro. to Mineral Preparation 3
- Perspectives on the Human Condition 3

## Third Year: Spring
- ES 346-Basic Thermodynamics 3
- GEOS 332-Ore Deposits and Structure 3
- MIN 301-Mine and Plant Design 3
- MIN 302-Underground Mine Engr. Engineeri 3
- MIN 370-Rock Mechanics 3

## Fourth Year: Fall
- MIN 407-Mine Reclamation & Environ. Mgmt. 2
- MIN 443-Prin. & Appl. Industrial Explosives 3
- MIN 454-Mining Methods I 2
- MIN 489-Mine Design Project I 1
- Technical Elective* 3
- Perspectives on the Human Condition 3

## Fourth Year: Spring
- MIN 408-Mineral Valuation & Economics 3
- MIN 409-Research & Computer Appl. 3
- MIN 484-Mining Methods III 2
- MIN 490-Mine Design Project II 2
- Technical Elective* 3

* Note: Students must choose one technical elective from GE 440, Min 401, 447, 472, 481, or 482. The other elective course should be planned in consultation with a mining engineering faculty advisor, and will have to be approved by the department head.