College of Engineering and Mines

UNIVERSITY OF ALASKA FAIRBANKS

Mining Engineering

2017-2018 Bachelor of Science

MATH 251X Calculus 1 — Spring, Fall

MATH 252X Calculus 2 — Spring, Fall

MATH 253X Calculus 3 — Spring, Fall

PHYS 211X Physics 1 — Spring, Fall

PHYS 212X Physics 2 — Spring, Fall

CHEM 105X Chemistry I — Spring, Fall

CHEM 106X Chemistry II — Spring, Fall

WRTG 111X Intro. to Academic Writing — Spring, Fall

WRTG 213X (recommended) Academic Writing about Social and Natural Science — Spring, Fall

OR

WRTG 211X Academic Writing about Literature — Spring, Fall

COJO 131X Fund. Oral Comm.: Groups — Spring, Fall

OR

COJO 141X Fund. Oral Comm.: Public — Spring, Fall

LS 101 Library Info and Research — Spring, Fall

+ **General Education Requirements (GER)**
18 credits
Spring, Fall

Arts	3
Humanities	6
Social Science	6
Ethics	3

MATH 302 Differential Equations — Spring, Fall

ES 346 Basic Thermodynamics — Spring, Fall

MIN 103 Intro to Mining Engineering — Fall

MIN 104 Mine Safety & Oper. Lab — Fall

GE 261 General Geology for Engineers — Spring

MIN 202 Mine Surveying — Fall

MIN 225 Quant. Methods in Mining Engr. — Fall

MIN 226 Mine Develop. — Spring

ES 208 Mechanics — Spring, Fall

ES 331 Mechanics of Materials — Spring, Fall

GEOS 262 Rocks & Minerals — Fall Even Years

MIN 313 Intro to Min. Prep — Fall Odd Years

ES 307 Elements of Electrical Engr. — Spring, Fall

MIN 484 Surface Mining Methods — Spring

ES 341 Fluid Mechanics — Spring, Fall

MIN 370 Rock Mechanics — Spring

MIN 443 Industrial Explosives — Fall

GEOS 332 Ore Deposits and Structure — Spring

MIN 482 Computer-Aided Mine Design: VULCAN — Fall

MIN 301 Mine Plant Design — Spring

MIN 302 Underground Mine Envir. Engr. — Spring

MIN 407 Mine Reclam. & Envir. Mgmt. — Fall EvenYears

MIN 408 Mineral Valuation and Economics — Spring

+ **Tech Electives***
3 credits
Spring, Fall

Select from the following:
CE 603 Arctic Engr.
GE 440 Slope Stability
MIN 401 Mine Site Field Trips
MIN 415 Coal Prep.
*Consult with your MIN advisor.

MIN 454 Underground Mining Methods — Fall

MIN 489 Mining Design Project I — Fall

MIN 409 Operations Research — Spring

MIN 490 Mining Design Project II — Spring

MIN 485 Mining Engr. Exit Interview — Spring

+ FE Exam

Prerequisite
Corequisite
Recommended
Required Course
Tech Elective

CHEM 105 — Course Number
Chemistry I — Course Name
Spring, Fall — Semester Offered

Please note: This is a flowchart, not a timeline!