College of Engineering and Mines

Geological Engineering
Bachelor of Science

MATH 251X Calculus 1 — Spring, Fall

MATH 252X Calculus 2 — Spring, Fall

MATH 253X Calculus 3 — Spring, Fall

MATH 302 Differential Equations — 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 Writing Across Contexts — Spring, Fall

WRTG 21XX* Academic Writing — Spring, Fall
**choose from a suite of classes*

COJO 1X1X* Oral Communication — Spring, Fall
**choose from a suite of classes*

LS 101 Library Info and Research — Spring, Fall

General Education Requirements (GER)
18 credits
Spring, Fall

Arts	3
Humanities	3
Social Science	6
Additional Arts, Humanties, or Social Science	3*
Ethics	3

*includes ANT requirement

GE 101 Intro to Geological Engineering — Fall

ES 346 Basic Thermodynamics — Spring, Fall

ES 208 Mechanics — Spring, Fall

ES 331 Mechanics of Materials — Spring, Fall

MIN 202 Surveying and CAD for Engineers — Fall
OR
CE 112 Elementary Surveying — Spring

MIN 390 Geostatistics & Mineral Econ. — Fall
OR
STAT 200 Statistics — Spring, Fall
+
ESM 450 Economic Analysis and Operations — Fall

ES 341 Fluid Mechanics — Spring, Fall

MIN 370 Rock Mechanics — Spring

GE 261 General Geology for Engineers — Spring

GEOS 213 Mineralogy — Fall

GEOS 214 Petrology and Petrography — Spring

GE 326 Intro Geotechnical Engineering and Foundations — Fall

GE 375 Terrain Analysis and GIS — Spring

GEOS 322 Stratigraphy and Sedimentation — Fall

GEOS 314 Structural Geology — Spring

GE 381/382 Field Methods — Summer

GE 420 Groundwater Engineering — Fall

GE 405 Engineering and Environmemtal Geophysics — Fall

GE 480* ** Senior Design — Spring

***Most courses are prerequisites. Check with your GE advisor.

+

Tech Electives
6 credits
Spring, Fall
Check with your GE advisor.

+

FE Exam

Prerequisite
May be taken concurrently
Recommended
Required Course
Tech Elective

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

Updated October 2023

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