# College of Engineering and Mines

## Geological Engineering
**2025-2026** 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, Humanities, or Social Science | 3* |
| Ethics | 3 |

*includes ANT requirement

**GE 101**
Intro to Geological Engineering
Fall

**CE 112**
Elementary Surveying
Fall

**ES 346**
Basic Thermodynamics
Spring, Fall

**ES 208**
Mechanics
Spring, Fall

**ES 331**
Mechanics of Materials
Spring, Fall

**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

October 2025

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