Michigan Technological University

Minor in Mining Engineering

Program Code EMGM, Academic Year 2025-2026 Department of Geological and Mining Engineering and Sciences Minimum Credits Required: 18

Required Courses: 4 credits

- GE 2020 Intro to Mining Engineering and Mining Methods (2) Prereqs: none
- GE 2320 Mining Methods and Systems (2) Prereqs: GE2020

Elective Courses: 12 credits

- GE 3440 Drilling, Blasting, and Mine Safety Engineering (4) Prereqs: GE2020 and PH2100 and MA2160
- GE 3890 Eng Geology & Rock Mechanics (3) Prereqs: (GE2000 or GE2100) and (GE3050 or ENG2120 or MEEM2150)
- GE 3870 Resource and Reserve Estimation (3) Prereqs: GE2020 and MA3710
- GE 3880 Mine Planning and Design (3) Prereqs: GE2320 and GE3400 and GE3870
- GE 4290 Mine Ventilation Engineering (3) Prereqs: GE2020 and GE2320 and ENG3200
- GE 4360 Bulk Materials Dynamics & Engineering (3) Prereqs: PH2100 and GE2320 and ENG2120
- GE 4680 Operations Research for Mining Engineers (3) Prereqs: GE2020 or GE2320
- GE 4934 Special Topics in Mining Engineering (1-5) Prereqs: none

Additional Electives: 0 to 5 credits

Students must consult with a departmental advisor to select additional elective courses