The mineral preparation engineering program offers specialization in the processes used to concentrate target minerals and remove undesirable material from mined ore. Interdisciplinary study of chemistry, physics, the geological sciences and engineering are integrated to allow the characterization, separation, agglomeration, extraction and handling of mineral particles.

Since large quantities of solid waste and process water are often produced as a result of mineral extraction, pollution control technology is also an important aspect of mineral preparation.

Students are prepared for career opportunities in the mineral industry, consulting and research firms, environmental industry, and investment and commodity firms in the private sector.

**MS Degree**

Minimum Requirements for Degree: 30–36 credits

1. Complete the general university requirements (page 200).
2. Complete the master’s degree requirements (page 204).
3. Complete the following:
   - MIN F415—Coal Preparation ..................................................3
   - MPR F601—Froth Flotation .....................................................3
   - MPR F606—Plant Design .........................................................3
   - MPR F688—Graduate Seminar I ...........................................1
4. Complete the thesis or non-thesis requirements:
   - **Thesis**
     a. Complete the following:
        - MPR F699—Thesis ..............................................................6
        - Technical electives ..........................................................14
     b. Minimum credits required ................................................30
   - **Non-Thesis**
     a. Complete the following:
        - MPR F698—Non-thesis Research/Project ...........................6
        - Technical electives ..........................................................20
     b. Minimum credits required ................................................36