The Mines geology and geological engineering graduate program offers a premier education in applied geosciences. A broad selection of graduate programs are offered in geology, geological engineering and mineral resources and several interdisciplinary education tracks in hydrology, geochemistry and petroleum sciences. Faculty create an interactive learning environment rooted in outstanding research that is relevant to society and current societal issues.

**DEGREE OPTIONS**

- **Doctor of Philosophy in geology or geological engineering:** 72 credit hours, including at least 24 credit hours of research. Doctoral students must pass the qualifying exam and complete and successfully defend a satisfactory thesis.

- **Master of Science in geology or geological engineering (thesis based):** 36 credit hours, including at least 12 credit hours of research.

- **Master of Engineering in geological engineering (non-thesis based):** 30 credit hours, comprised of 24 credit hours of coursework and 6 credit hours of independent study.

- **Professional Master in mineral exploration (non-thesis based):** 30 credit hours of coursework including up to 9 credit hours of independent study.

- **Certificates in economic geology and exploration methods:** 12 credit hours of coursework including six core courses and six electives.
RESEARCH EMPHASIS

Faculty, staff and students conduct cutting-edge research in a wide variety of disciplines that are related to earth, energy and environment. The department strives to increase knowledge in these disciplines, with a focus on discovery and extraction of resources, environmental sustainability, new technologies and applications to address global energy demands.

Four research centers are associated with the department, including the Center for Advanced Subsurface Earth Resource Models (CASERM), the Center for Mineral Resources Science (CMRS), the Chevron Center of Research Excellence (CoRE) and the Integrated Groundwater Modeling Center (IGWMC).

APPLICATION INFORMATION

- Generally, applicants are expected to hold a four-year undergraduate degree in earth science and/or engineering.
- The Graduate Record Examination (GRE), no minimum score applies.
- For international applicants or applicants whose native language is not English, a TOEFL or IELTS exam is required to prove proficiency in English, minimum score applies.
- Statement of purpose and updated curriculum vitae or resume.
- Minimum of three letters of recommendation and transcripts for all post-secondary degrees.
- A non-refundable application fee.

ACCEPTING APPLICATIONS

TO LEARN MORE, VISIT:
gradprograms.mines.edu/ge or contact geology@mines.edu