The Mines petroleum engineering graduate program educates engineers for the worldwide petroleum industry, performs research that enhances the state-of-the-art in petroleum technology and serves the industry and public good through professional societies and public service. Skills in this branch of engineering are needed to meet the ever-increasing demand for energy. The world’s energy portfolio includes hydrocarbon, geothermal and wind energy storage, as well as environmental issues such as nuclear waste disposal. The program emphasizes integrated, multidisciplinary teamwork in classroom instruction and research and actively pursues interdisciplinary activities with many other Mines departments.

DEGREE OPTIONS

- **Doctor of Philosophy**: 78 credit hours, comprised of at least 30 credit hours of research. Doctoral students must pass the qualifying exam and complete and successfully defend a satisfactory thesis.

- **Master of Science**: 30 credit hours, comprised of at least 24 credit hours coursework and at least 6 credit hours of research.

- **Master of Engineering**: 30 credit hours of graduate course credit.

- **Professional Master’s in petroleum reservoir systems**: 30 credit hours of coursework.
RESEARCH

Research institutes, centers and consortia associated with the department include:

- Unconventional Natural Gas and Oil Institute
- Marathon Center of Excellence for Reservoir Studies
- Petrophysics of Reservoir Sediments: Organics, Clay, Sand and Shale Consortium
- Center for Earth Mechanics, Materials and Characterization
- Fracturing, Acidizing, Stimulation Technology Consortium
- Unconventional Reservoir Engineering Project Consortium

APPLICATION REQUIREMENTS

- The Graduate Record Examination (GRE) with quantitative reasoning score of 155 or better (for PM, ME and MS candidates) and 159 or better (for PhD candidates) preferred.
- For international applicants or applicants whose native language is not English, a TOEFL score of 80 or higher (or 550 for the paper-based test, 213 for the computer-based test) is required. In lieu of a TOEFL score, an IELTS score of 6.5 or higher will be accepted.
- Applicants must have taken core engineering, math and science courses. This includes three units of calculus, two units of chemistry with quantitative lab, two units of physics, differential equations, statics, fluid mechanics, thermodynamics and mechanics of materials.
- A minimum of three letters of recommendation and transcripts for all post-secondary degrees. Applicant GPA must be at least 3.0 on a 4.0 scale.

ACCEPTING APPLICATIONS

TO LEARN MORE, VISIT:
gradprograms.mines.edu/pe or contact petroleum@mines.edu