The Mines data science graduate program provides a substantial foundation in statistics and computer science, while developing expertise in a particular application domain of science or engineering. The balance between these elements is a strength of the program and prepares candidates for data science careers in industry or government or for further study at the PhD level. Throughout the program, there is an emphasis on working in teams, creative problem solving and professional development.

**PROGRAM STRUCTURE**

**Master of Science (non-thesis):** 30 credit hours that follow a 3x3+1 design with three modules and a mini module.

The modules are comprised of data modeling and statistical learning, machine learning, data processing and computational algorithms and a student-designed course group in an application area. The flexibility of coursework in the third module is a unique aspect of this program and leverages the depth of graduate programs at Mines. The mini-module addresses professional enrichment including professional ethics, entrepreneurship, project management and communication.
REAL-WORLD APPLICATIONS
Students will increase their skills in data algorithms and statistics, while developing a focused area of application based on their individual career goals. Some areas of possible domain enrichment include environmental science, geophysics, electrical engineering, economics or computational science.

PROGRAM ADMISSION REQUIREMENTS

- Bachelor’s degree in engineering, computer science, physical sciences, statistics, mathematics, economics or equivalent, with a grade-point average of 3.0 or higher on a 4.0 scale.
- Graduate Record Examination (GRE) with quantitative reasoning section score of 151 or higher or a GMAT score above 640. Applicants who have graduated from Mines within the past five years are not required to submit GRE scores.
- A personal statement explaining how the applicant’s professional goals, training and expertise are a good fit for this program.
- For international applicants or applicants whose native language is not English a TOEFL score of 79 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.