Bachelor of Science
QUANTITATIVE BIOSCIENCES & ENGINEERING
QBE.MINES.EDU

PROGRAM SCOPE
The Quantitative Biosciences and Engineering (QBE) program draws from chemistry, computer science, engineering, mathematics and physics to address the biology of the living world. This multidisciplinary approach is integral to understand biology in the 21st Century.

FIELD SESSION
Field session spans three weeks following junior year:
- **Week one**: Field exploration of biological systems in the Front Range of Colorado
- **Week two**: Perform laboratory analyses of samples collected in week one
- **Week three**: Bioinformatic analysis of DNA and "big data" analysis of sampled ecosystems

OUR PHILOSOPHY
We believe that we can enhance our level of understanding biology — not only of evolution’s role in establishing humans as the dominant organism on Earth, but of how life in all of its forms contributes to the view that the Earth itself is an organism.

By embracing a multidisciplinary approach, students enhance their understanding of biology — from a natural state to biomaterials, biomechanics, biophysics, biochemistry, bioinformatics and synthetic biology — which prepares them for careers in medicine, biotechnology, industry and government.

$100,006 MEDIAN STARTING SALARY OF BIOSCIENTISTS IN COLORADO*

AREAS OF STUDY
Undergraduate students complete a rigorous program of study that includes in-depth exploration of mathematics, chemistry, physics, computer science, humanities, systems biology and quantitative bioscience and engineering that lie at the heart of new biological understanding of the living world.

DEGREE
- **Quantitative Biosciences and Engineering**
  - Bachelor’s, master’s and PhD offered

MINORS
- **Quantitative Biosciences and Engineering**

COMBINED DEGREE PROGRAM
- The program offers the opportunity to begin work on a master of science degree while completing a bachelor’s degree.

*https://tinyurl.com/44zzkt7
(Data assumes completion of an advanced degree)