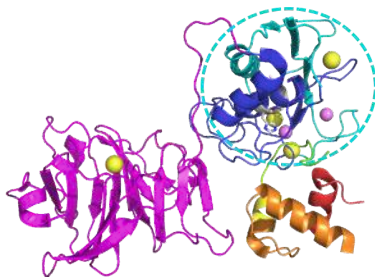




**The quantitative biosciences and engineering program provides** rigorous training at the interface between biology and mathematical, computational and engineering sciences that are the hallmark of a Mines education. This program will produce the next generation of quantitative scientists needed for innovation in biology and other disciplines. Students in the program have diverse backgrounds, and are united by their interests in biosciences and developing approaches to solving real-world problems in the greater context of earth, energy, health and environment. This flexible program is tailored to match the needs, interests and backgrounds of all students, and creates an interdisciplinary culture.



## PROGRAM STRUCTURE

- **Doctor of Philosophy:** 72 credit hours, comprised of at least 24 credit hours of coursework and 24 credit hours of research. Doctoral students must pass the comprehensive exam, complete and successfully defend a satisfactory thesis.
- **Master of Science (thesis based):** 30 credit hours, comprised of 10 credit hours of core courses, 8 credit hours of electives and 12 credit hours of research.
- **Master of Science (non-thesis):** 30 credit hours, comprised of 10 credit hours of core courses, 14 credit hours of electives and 6 credit hours of independent study.



## CORE COURSES

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- Cell Biology and Biochemistry
- Systems Biology
- Applied Bioinformatics

## RESEARCH AREAS

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Research at Mines in this rapidly growing field currently includes, but is not limited to, the following areas: bioinformatics and computational biology; biosensors and devices; digital healthcare; environmental toxicology and microbiology; laser design and imaging; mathematical biology and physical biochemistry.

## PROGRAM ADMISSION REQUIREMENTS

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- A bachelor's degree with a grade-point average of 3.0 or better on a 4.0 scale. All students with a bachelor's degree and an interest in the quantitative aspects of biology and health applications will be considered.
- Graduate Record Examination (GRE) is required. Applicants who have graduated from Mines within the past five years are not required to submit GRE scores.
- 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 will be accepted.



## ACCEPTING APPLICATIONS

**TO LEARN MORE, VISIT:**

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