

BACHELOR OF SCIENCE **BIOCHEMISTRY**

CHEMISTRY.MINES.EDU



PROGRAM SCOPE

The bachelor of science in biochemistry is designed to prepare students for careers in the growing biotechnology industry (including medical devices and pharmaceuticals) or who desire to continue education in medical-based professional schools or to graduate school in bio-related disciplines (e.g. biochemistry, biotechnology, molecular biology). The Mines biochemistry degree is uniquely focused on analytics, gene editing and microbiology.

DEGREE TRACKS

- ✓ Bachelor of Science, Biochemistry



AREAS OF STUDY

The biochemistry curriculum is based on rigorous fundamental science complemented by application of these principles to the earth, environment and energy fields.

The curriculum runs parallel to the chemistry curriculum for the first two years, with a required biochemistry laboratory, and is largely dynamic giving students flexibility in courses. Students and faculty also maintain a close relationship with Mines chemistry and engineering departments and NREL.

DEGREE APPLICATIONS:

- New chemical products from natural products through genetic engineering
- Detecting drugs and metabolic products of pharmaceuticals
- New technologies in point-of-care analytics
- Biochemical processes and biological environments that affect petroleum and mining activities

CAREER OPPORTUNITIES

Professional biochemists apply their knowledge in many different areas ranging from environmental processes to the development of new biomaterials and novel renewable energy.

They work in academic environments, high-tech start-ups, and research and development laboratories associated with practically every advanced technological field including medicine, energy, biotechnology, computing and agriculture.

POTENTIAL JOB TITLES

- Analytical chemist
- Biomedical scientist
- Clinical research associate
- Forensic scientist
- Healthcare scientist
- Research scientist
- Scientific laboratory technician
- Toxicologist

7.5%

GROWTH OF METRO DENVER BIOSCIENCE
EMPLOYMENT OVER THE LAST SIX YEARS

\$82,340

AVERAGE WAGE FOR BIOSCIENCE
PROFESSIONALS IN METRO DENVER