



Pathway: Engineering & Technology—Bioengineering

Get the Facts:

Biomedical Engineering is the application of the principles and tools of engineering to the enhancement of scientific research and problem solving in the biological, pharmacological, and medical fields.

Biomedical Engineering is of particular relevance and benefit to students with interests in the application and relationship of biology, mathematics, chemistry, and physics to medicine and health.

Biomechanical Engineering is the practical implementation of this understanding, and embodies the attempts of humans to design and develop mechanical devices that mimic, measure, improve, repair, or replace the function of living systems.

Workforce Trends:

Employment in Bioengineering is projected to GROW 23 percent from 2014 to 2024, much faster than the average for all occupations.

Growing technology and its application to medical equipment and devices, along with an aging population, will increase demand for bioengineering work.

Bioengineering is:

- High demand
- High skill
- High wage

Occupation Outlook:



The Utah statewide annual median wage:

Biomedical/Biomechanical Engineer with a bachelor (BS) degree is \$77,780

Sample Career Occupations:

- Pharmaceuticals
- Medical Devices
- Food Processing
- Disease Research

College and Career:

There are a number of options for education and training beyond high school, depending on your career goals.

The following colleges offer programs in Bioengineering:

- USU – BS Biological Engineering
- U of U – BS Biomedical Engineering

Given the diversity of the bioengineering discipline, individuals will have opportunities to work with consulting and industrial firms in a variety of fields including bioprocessing, bioenergy, environmental, food production, agricultural, pharmaceutical, and biomedical.

The diverse expertise makes biological engineers exceptionally valuable in today's challenging world.