

Biomedical Engineering

Bachelor of Science

What is Biomedical Engineering?

If you have an interest in healthcare but love knowing how things work, a degree in biomedical engineering from South Dakota Mines might be the perfect fit for you.

Biomedical engineers apply engineering principles to the fields of healthcare and biology to design life-saving medical products and processes.

What does a Biomedical Engineer do?

Biomedical engineers are on the cutting edge of modern medicine. The types of work they do can vary depending on area of study. Some design and create equipment and devices, such as artificial internal organs or prosthetics. Others work in injury prevention, tissue engineering, or pharmaceutical drug delivery systems. Biomedical engineering is a basis for many career paths and graduate programs, including medical school.

Biomedical engineers are in high demand, especially in a time when new technologies are evolving quickly, and the baby boomer population needs equipment that will allow them to live actively longer.

There are lots of career avenues in the field of biomedicine, including:

- Developing bioinstrumentation used in the diagnosis and treatment of medical problems
- Biomaterials development, which can be either natural living tissue or artificial materials. For instance, this field might include tissue engineering, biomedical implant development, drug delivery, or nano-implants
- Physician
- Rehabilitation engineering, which uses engineering and computer science to develop devices that assist individuals recovering from or adapting to physical and cognitive impairments
- Biomedical scientist or researcher
- Develop hardware and software for medical devices as a medical technology developer

Biomedical Engineering Research

At South Dakota Mines, you don't have to wait until grad school to do research. As an undergraduate biomedical engineering student, you will have the opportunity to join ongoing research in areas such as cartilage repair for arthritis sufferers, biomaterial development, medical device fabrication, and drug delivery system development.

For more information: <https://www.sdsmt.edu/Academics/Degrees/Biomedical-Engineering/>



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