

## Career Focus:

# Biomedical Engineering

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Healthcare has the broadest spectrum of opportunities in the workforce by far. With the economy in its current position, it is important to have the job security that healthcare offers. Many people believe that they cannot work in the healthcare industry because they do not want to be a doctor or a nurse, but there are many options for those interested in helping others. There is a branch of healthcare that is focuses on engineering called biomedical engineering.



Biomedical engineers focus on enhancing the quality of life of patients. In order to do this, engineers use technology like computers for research and development to create technology to help patients live a better life. An example of the work done by these engineers is the artificial heart. This technology was created from the research and design done by a biomedical engineer. The creation of the artificial heart, prosthesis, pacemakers, etc... is only one part of biomedical engineering. Other areas of biomedical engineering include:

- Biomechanics
- Tissue engineering
- Pharmaceutical engineering
- Genetic engineering
- Medical imaging
- And many more

The demand for biomedical engineers continues to increase each year. With technology becoming more advanced, medical technology must stay up to date with the rest of the world. This requires knowledgeable engineers that are able to change with the times. In order to become a biomedical engineer, a student will need a bachelor's degree, however some students have a degree in mechanical, electrical, and chemical engineering with a specialty in biomedical. There is also the option of continuing the education to receive a master's or doctorate degree. The salaries of the engineers vary with the education. The average starting salary for a bachelor's degree is \$52,000, but the salary of an engineer with a doctorate degree can be over \$90,000.

Countless lives are saved everyday by the research and development of technology by biomedical engineers. These engineers give some people that second chance in life that they thought they would never get again. From the prosthetic limbs to the medication taken by those across the world, biomedical engineers are helping change lives.

