

Biomedical Engineer

Design the machines and implants that keep people alive, then prove they are safe.

TYPICAL PAY

\$109,370

a year, full time

PAY RANGE

\$72k to \$168k

starting to experienced

TIME TO QUALIFY

4 to 6 years

after high school

DEMAND

Good

job outlook

LICENCE NEEDED

No

anyone can do it

WHERE YOU WORK

Medical device companies, hospitals, research labs, manufac...

How you get there

- 1 High school** Grades 11 and 12
Calculus, physics, chemistry and biology. Any coding course you can get.
- 2 Bachelor's degree in biomedical engineering** 4 years
Pick a program accredited by ABET (the Accreditation Board for Engineering and Technology). Some people instead take mechanical or electrical engineering with biology electives, which keeps more job doors open.
- 3 Internships or co-op terms** During the degree
Two or three paid terms at a device company or hospital. This is the step that decides whether you get hired.
- 4 Fundamentals of Engineering exam** 1 day
Taken in your final year. Optional in this field, but it is the first step if you ever want a professional license.
- 5 First engineering job, or a master's degree** 0 to 2 years
A master's degree is common for research, imaging and neural engineering roles, and many companies pay for it later.

Pros and cons

- + Your work ends up inside real patients
- + Strong pay straight out of a four year degree
- + Device jobs are clustered but plentiful
- The degree is broad, so some employers prefer mechanical or electrical graduates
- Heavy paperwork and regulation, slow product cycles
- Jobs concentrate in a few states, so expect to move

Optional boosts

Regulatory affairs. Quality engineering. Embedded software. Clinical engineering in hospitals.

Good to know

The first implanted pacemaker was built in a garage works...

Earl Bakken, an electrical repairman in Minneapolis, built a battery powered wearable pacemaker in 1957 after a power cut killed a child on a plug-in unit. His company, Medtronic, turned Minnesota into the...

Most devices are cleared, not approved

The usual route to market in the United States is to show the Food and Drug Administration that a new device is substantially equivalent to one already sold. Only the highest risk devices, like implanted hear...

Where these numbers come from

My Next Move: Bioengineers and Biomedical Engineers
Biomedical Engineering Society

ABET, the accreditor of engineering degree programs

National Council of Examiners for Engineering and Surveying: exams

Numbers checked September 2026. Pay figures are typical full-time annual amounts in United States dollars, based on Bureau of Labor Statistics wage data and published pay scales. They vary by state, employer and experience. Tuition is for in-state students at public schools unless the card says otherwise. Sources, links and the click-through version: <https://career.help/us/careers/biomedical-engineer>



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