R&D Engineering Intern – Summer 2025 (Undergraduate)

Careers That Change Lives

The possibilities at the intersection of medicine and technology are endless, which means endless opportunities to make your mark on the world. Our interns do real work within experienced engineering teams to improve lives of millions. Engineering roles in the R&D engineering group can include R&D, Biomedical, Electrical, Mechanical Design, Product, Sustaining, Systems and Test engineers, examples of work in each of these areas are listed below.

R&D Engineer

- Designs, develops, analyzes, troubleshoots and provides technical skills during research and/or product development.
- Designs studies to investigate specific life science questions within field of expertise.

Biomedical Engineer

- Designs, develops and provides safety testing, repair, and maintenance of biomedical equipment
- Ensures that the biomedical equipment is in compliance with applicable regulatory requirements and quality control standards.

Electrical Engineer

- Researches, develops, designs, and tests electrical components, equipment, systems, and networks.
- Designs electrical equipment, facilities, components, products, and systems for commercial, industrial, and domestic purposes

Mechanical Design Engineer

- Researches, plans, designs, verifies, validates and develops mechanical and/or electromechanical products and systems, such as metals, instruments, controls, plastics, robots, engines, machines and mechanical, resonance, hydraulic or heat transfer systems for production, transmission, measurement, and use of energy.
- Recommends various technology options or approaches for system, processes, facility or program improvements in terms of safety, performance, efficiency or costs.
- May be responsible for the transfer from R&D to manufacturing

Product Engineer

- Responsible for production support engineering with respect to testing methods, procedures, and problems; device specification and yield problems; minor redesign of devices and masks; analysis of customer returns; supplier related engineering changes and optimizing device production relative to cost constraints.
- Assumes responsibility for device and/or internally produced or externally purchased components after transfer into high-volume production and usually responsible for entire device manufacturing operations other than wafer fabrication.

Systems Engineer

- Performs technical planning, system integration, verification and validation, evaluates alternatives including cost and risk, supportability and analyses for total systems.
- Analyses are performed at all levels of total system product to include: concept, design, fabrication, test, installation, operation, maintenance and disposal.

Test Engineer

- Designs, develops, and implements testing methods and equipment.
- Plans and arranges the labor, schedules, and equipment required for testing and evaluating standard and special devices.

You have learned a lot to get here — we want you to keep growing. With our expanding portfolio of innovative products and services, Medtronic is the global leader in delivering healthcare solutions for over 70+ disease states in 150+ countries.

Internships are full-time (40 hours/week), paid positions that are 11-12 weeks in length. We offer competitive pay, housing assistance with relocation expense reimbursement (for out-of-state interns), a transportation stipend, and educational and social events throughout the summer.

A majority of our internship positions are located at our primary location hubs of: Minnesota, California, Colorado and Northeastern US (Connecticut & Massachusetts). However, we have summer internship opportunities in other states as well like Arizona, Tennessee, Texas and Florida. Candidate location preference is strongly considered into account during the interview and offer process. Candidate flexibility in location allows candidates more position opportunities.

Applicants must be located in the US during the entirety of the internship.

Must Haves:

To be considered for a summer 2025 engineering internship, you must meet the following basic requirements. How you meet these criteria must be clearly indicated on your resume to be considered for a position.

- Working towards a Bachelor's degree with an anticipated graduation date of Spring 2026, Winter 2026 or Spring 2027
- Working towards a degree in biomedical engineering or related engineering major
- Legally authorized to work in the U.S. on a full-time basis and does not require sponsorship in the future for an employment visa

- Participants must be able to participate full time (40 hours/week) as part of our intern cohort:
    - Dates: June 2nd – August 15th * Exception to these dates are possible only for students enrolled at schools that follow the quarter system

Nice to Haves:

- A minimum 3.0 out of a 4.0 cumulative GPA
- Flexibility in geographic location
- Knowledge of one or more of the following technologies: C, C++, C#/.NET, SQL, Java, Python, Microsoft Access, Microsoft Visual Studio, CAD:SolidWorks/Autocad or equivalent, Minitab, MATLAB, Ardyubi/Raspberry Pi, LabVIEW
- Prior work on projects in a team environment
- Relevant academic project, internship, or lab experience
- Technical writing skills
- Experience with statistics, data analysis, or mechanical or electrical design
- Strong written and verbal communication skills who is self-motivated, proactive, and willing to learn

About Medtronic:

Together, as one of the largest Medical Device companies in the country, we can change healthcare worldwide. At Medtronic, we push the limits of what technology, therapies and services can do to help alleviate pain, restore health, and extend life. We challenge ourselves and each other to make tomorrow better than yesterday. It is what makes this an exciting and rewarding place to be.

We want to accelerate and advance our ability to create meaningful innovations - but we will only succeed with the right people on our team. Let's work together to address universal healthcare needs and improve patients' lives. Help us shape the future and engineer the extraordinary.

Candidates applying for Medtronic's Summer Internship Program must have current work authorization and be legally authorized to work in the U.S. The Medtronic Summer Internship Program does not provide work authorization sponsorship for summer intern positions. Individuals with temporary visas such as E, F-1, H-1, H-2, L, B, J or TN, or who need sponsorship for work authorization now or in the future, are not eligible for the Medtronic Summer Internship Program.

Physical Job Requirements:

The physical demands described within the Responsibilities section of this job description are representative of those that must be met by an employee to successfully perform the essential functions of this job.
Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee is regularly required to be independently mobile. The employee is also required to interact with a computer and communicate with peers and co-workers.