

Computer Engineer

Design the chips, boards and machines that software runs on.

TYPICAL PAY

\$161,740

a year, full time

PAY RANGE

\$93k to \$225k

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

**Chip companies, device makers,
defense contractors, research labs**

How you get there

- 1 High school with heavy math and physics** Grade 12
Calculus and physics are the entry requirements for almost every engineering school.
- 2 Bachelor of science in computer engineering** 4 years
Pick a program accredited by ABET (the Accreditation Board for Engineering and Technology), which is what employers and licensing boards recognize.
- 3 Internships or a co-op** Summers, or a full year
One or two paid summers inside a real company. This is what turns a degree into a job offer.
- 4 First engineering job** 1 to 2 years
Junior design, verification or test engineer. You learn the company's tools for a year before you are trusted with your own block of the design.
- 5 Master's degree, if you want chip design** 1 to 2 more years
Optional for most roles, close to expected for advanced semiconductor and processor design work.

Pros and cons

- + One of the best paid careers you can enter with a four year degree
- + Work that ends up in physical products millions of people use
- + Employers pay for internships, relocation and graduate school
- The degree is hard and the dropout rate in engineering is high
- Job openings are concentrated in a handful of states
- Chip projects run on years long cycles and crunch before every deadline

Optional boosts

Digital design and verification. Embedded systems and firmware. Semiconductor process and packaging. Security clearance.

Good to know

A chip mistake costs millions to fix

Once a processor design is sent to the factory, correcting an error means a new set of masks and another run of wafers. That is why verification engineers, the people who try to break a design before it...

The country is building chip factories again

Federal funding has pushed a wave of new semiconductor plants in Arizona, Texas, Ohio and New York. They need engineers and technicians in places that had almost none of this work ten years ago.

Where these numbers come from

My Next Move: Computer Hardware Engineers (17-2061.00)

ABET: accreditation of engineering programs

NCEES: Fundamentals of Engineering exam

NCEES: Principles and Practice of Engineering exam

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/computer-engineer>



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