

Civil Engineer

Roads, bridges, water and buildings. A four-year degree, then a licence that lets you sign the drawings.

TYPICAL PAY

\$101,000

a year, full time

PAY RANGE

\$67k to \$150k

starting to experienced

TIME TO QUALIFY

4 to 8 years

after high school

DEMAND

Good

job outlook

LICENCE NEEDED

Yes

regulated job

WHERE YOU WORK

Engineering firms, construction, government, utilities

How you get there

- 1 High school** Grades 11 and 12
Advanced Functions, Calculus, Physics and Chemistry are required for admission. Marks in the high 80s or above at most schools.
- 2 Accredited engineering degree** 4 to 5 years with co-op
A four-year Bachelor of Engineering or Applied Science in civil engineering at a school accredited by the Canadian Engineering Accreditation Board. Waterloo, Toronto, UBC (University of British Columbia), McGill, Alberta, Calgary, Queen's, McMaster and many others.
- 3 Engineer-in-training** About 4 years
Register with your provincial regulator and work under a licensed engineer. Log your experience.
- 4 Professional practice exam** During your engineer-in-training years
A law and ethics exam. Some provinces also require a technical exam for graduates of non-accredited programs.
- 5 P.Eng (professional engineer) licence** After 4 years
Apply with your experience record and references. Now you can seal drawings and take legal responsibility for designs.

Pros and cons

- + Steady demand: infrastructure always needs building and fixing
- + Tangible results you can drive past
- + Licence is respected and portable
- Hard degree with heavy math
- Four more years to full licence after graduation
- Consulting deadlines and site work can mean long hours

Optional boosts

Project Management Professional (PMP). Structural specialty and master's degree. LEED (green building) or sustainability credentials. Transportation or water resources expertise.

Good to know

The Iron Ring

Canadian engineering graduates receive an iron ring in a private ceremony and wear it on the little finger of their working hand. The tradition dates to 1925 and was written by Rudyard Kipling.

The Confederation Bridge

The 12.9 km bridge linking Prince Edward Island to New Brunswick is the longest bridge over ice-covered water in the world. It was designed to last 100 years.

Where these numbers come from

Job Bank: Civil engineers, wages (updated Nov 2025)
Engineers Canada: Overview of the licensing process
Professional Engineers Ontario: fee schedule (PDF, Nov 2022)

Numbers checked September 2026. Pay figures are typical full-time annual amounts in Canadian dollars, based on Government of Canada Job Bank wage data and published salary grids. They vary by province, employer and experience. Tuition is for domestic students. Sources, links and the click-through version: <https://career.help/ca/careers/civil-engineer>



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