

Industrial Engineer

Make factories, warehouses and hospitals run faster and waste less. The engineering degree most likely to end in a management job.

TYPICAL PAY

\$88,000

a year, full time

PAY RANGE

\$65k to \$125k

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

Factories, warehouses, hospitals, consulting firms

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 at most schools.
- 2 Accredited engineering degree** 4 to 5 years with co-op
 Industrial engineering at Toronto, Toronto Metropolitan, Dalhousie, Concordia, Windsor, Manitoba or Regina. Waterloo calls it management engineering. Some schools say manufacturing or systems engineering. All are accredited.
- 3 Engineer-in-training** About 4 years
 Register as an engineer-in-training (EIT) with your provincial regulator. Work under a licensed engineer. Log your experience.
- 4 Professional practice exam** During your EIT years
 A law and ethics exam, written during your first years of work.
- 5 P.Eng (professional engineer) licence** After 4 years
 Optional in many industrial jobs, but it protects your title and opens doors in consulting and government.

Pros and cons

- + Broadest job market of any engineering degree: factories, hospitals, airlines, banks
- + Fastest path from engineering into management
- + Less heavy math after school than other disciplines
- Less prestige; some engineers joke that it is 'imaginary engineering'
- Manufacturing towns can be far from big cities
- You are often the person recommending cuts and layoffs

Optional boosts

Lean Six Sigma belts. PMP (Project Management Professional). SCMP (Supply Chain Management Professional). MBA (master of business administration).

Where these numbers come from

Job Bank: Industrial and manufacturing engineers, wages (updated Nov 2025)
 Engineers Canada
 Professional Engineers Ontario

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/industrial-engineer>

Good to know

It started with a stopwatch

Industrial engineering began in the early 1900s with people timing factory workers. Two of them, Frank and Lillian Gilbreth, had 12 kids and ran their home like a factory. The book about it, *Cheaper by the...*

Toyota changed everything

The Toyota Production System, built in Japan after the Second World War, is the model for lean manufacturing everywhere. Toyota's plants in Cambridge and Woodstock, Ontario run on it and hire industrial en...



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