

Robotics Engineer

Build machines that sense, move and decide. Mostly code, some hardware, and no separate licence box for it.

TYPICAL PAY

\$95,000

a year, full time

PAY RANGE

\$70k 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

**Robotics companies, auto plants,
research labs, warehouses**

How you get there

- 1 High school** Grades 11 and 12
 Advanced Functions, Calculus, Physics and Chemistry are required for admission. Mechatronics programs want marks in the 90s.
- 2 Accredited engineering degree** 4 to 5 years with co-op
 Mechatronics at Waterloo, McMaster, Ontario Tech or Simon Fraser, or robotics engineering at Sherbrooke. Mechanical, electrical or computer engineering with a robotics option works just as well.
- 3 Engineer-in-training** About 4 years
 Register as an engineer-in-training (EIT) with your provincial regulator. Robotics is not a separate discipline, so your experience counts under mechanical, electrical or software.
- 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
 Many robotics jobs never require it, but you need it to call yourself an engineer.

Pros and cons

- + You build things that move; the results are obvious and fun
- + Pay tracks software, not just engineering
- + Kitchener–Waterloo, Montreal and Vancouver have real robotics companies
- Constant debugging; robots break in ways you did not predict
- Startup jobs can vanish when the funding dries up
- Hardware is slow: waiting on parts and machining

Optional boosts

ROS (Robot Operating System). Machine learning and computer vision. PLC (programmable logic controller) and industrial automation. Master's in robotics.

Good to know

Canada's robot arm is on the \$5 bill

Canadarm2 and the Dextre robot hand, built in Brampton, Ontario, keep the International Space Station running. They are on the back of the \$5 note. Canadarm3 is being built for the Gateway station that wi...

Four students and a robot

Clearpath Robotics was started in 2009 by four University of Waterloo engineering graduates building research robots. It grew into one of the biggest makers of self-driving warehouse robots and was...

Where these numbers come from

Job Bank: Mechanical engineers (closest match for robotics), wages (updated Nov 2025)

Job Bank: Computer engineers except software, 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/robotics-engineer>



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