

Agricultural Engineer

Engineering for food: machinery, barns, irrigation, grain storage and the systems that move a harvest.

TYPICAL PAY

\$104,000

a year, full time

PAY RANGE

\$58k to \$171k

starting to experienced

TIME TO QUALIFY

4 to 8 years

after high school

DEMAND

Moderate

job outlook

LICENCE NEEDED

Yes

regulated job

WHERE YOU WORK

Equipment makers, food plants, farms, consulting firms, governme...

How you get there

- 1 High school** Grades 11 and 12
Calculus, Advanced Functions, Physics, Chemistry, and Biology if you can fit it in.
- 2 Accredited engineering degree** 4 to 5 years with co-op
Biosystems or bioresource engineering, or mechanical engineering if you plan to work on machinery.
- 3 Summer or co-op work** During the degree
An equipment dealer, a food plant, a grain company or a farm. This is what separates the graduates who get hired.
- 4 Engineer-in-training** About 4 years
About four years of supervised experience registered with your provincial regulator.
- 5 P.Eng (professional engineer) licence** After about 4 years
Law and ethics exam plus an experience record, and then you can sign your own designs.

Pros and cons

- + Your work feeds people, which is easy to explain and easy to care about
- + Outdoors and indoors in the same week
- + Less competition for jobs than in big name engineering streams
- Pay lags behind oil, mining and software engineering
- Jobs are rural, so big city life is off the table
- Farm income swings, and so does spending on new equipment and buildings

Optional boosts

Precision agriculture. Irrigation and drainage design. Food plant process engineering. Livestock housing and ventilation.

Good to know

About 190,000 farms

Canada's last census of agriculture counted roughly 190,000 farms. Each one is a customer for better storage, drainage, ventilation or machinery, and most of them are far from any engineer.

Tractors drive themselves

Satellite guidance keeps modern tractors on a line within a couple of centimetres, so machines can drive the same track every year. Agricultural engineers design the equipment and the data systems b...

Where these numbers come from

Job Bank: Agricultural engineer, wages (updated Nov 2025)
University of Guelph College of Engineering
Engineers Canada
APEGA, the Alberta regulator for engineering and geoscience

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/agricultural-engineer>



Scan for the full clicker