

Mathematician

Prove things, model things, and solve problems other people cannot state clearly yet.

TYPICAL PAY

\$106,000

a year, full time

PAY RANGE

\$65k to \$161k

starting to experienced

TIME TO QUALIFY

4 to 10 years

after high school

DEMAND

Moderate

job outlook

LICENCE NEEDED

No

anyone can do it

WHERE YOU WORK

**Universities, government agencies,
banks, technology firms, defence...**

How you get there

- 1 High school** Grades 11 and 12
Take every math course offered, plus computer science. Math contests are worth doing because some universities use them in admission and scholarships.
- 2 Bachelor's degree in mathematics** 4 years
Pure math, applied math, or a combined math and computer science program. Choose co-op if the school offers it.
- 3 First job, or graduate school** Decision point
Many graduates stop here and work as analysts, modellers or developers. Others carry on.
- 4 Master's degree** 1 to 2 years
A year or two. Course-based master's programs in financial or industrial mathematics are aimed straight at industry jobs.
- 5 Doctorate** 4 to 5 years
Original research and a thesis. Required to teach and run research at a university.

Pros and cons

- + Cheap degree, strong job options in several industries
- + Co-op programs pay you while you study
- + Remote and flexible work is normal
- Job titles rarely say mathematician, so you have to look for the work
- University research jobs are scarce and take about a decade
- Long periods of being stuck is the actual job

Good to know

Canada has a whole faculty of math

The University of Waterloo's Faculty of Mathematics is the only faculty in North America dedicated to mathematics, with departments for pure math, applied math, combinatorics and optimization, statistics a...

The country runs its own olympiad ladder

The Canadian Mathematical Society runs the Canadian Open Mathematics Challenge, which feeds into the Canadian Mathematical Olympiad and then Canada's team for the International Mathematical...

Optional boosts

Quantitative finance. Cryptography and security. Operations research. Machine learning.

Where these numbers come from

Job Bank: Mathematician in Canada, wages (updated Nov 2025)
Canadian Mathematical Society
University of Waterloo: Faculty of Mathematics
Statistical Society of Canada

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/mathematician>



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