

Powerline Technician

About this job

Powerline technicians belong to an industry that helps make modern life convenient, comfortable, and efficient. They provide a critical service installing, repairing and maintaining a system important to our communities. The work can include travel to remote locations and responding to emergencies.



POWERLINE TECHNICIAN FALLS UNDER NATIONAL OCCUPATION CLASSIFICATION (NOC) CODE #7244/72203



- Four-year program
- Red Seal Certificate
- Requires out of the territory technical training
- Construction

\$150,528

Estimated Average Journeyperson Salary

APPRENTICESHIP, TRADES, AND OCCUPATIONAL CERTIFICATION

What can I expect to do for work if I become a Powerline Technician?

Powerline technicians construct, maintain and repair overhead and underground electrical power transmission and distribution systems. In general, powerline technicians:

- erect and maintain steel, wood or concrete poles, towers and guy wires,
- install, maintain and repair overhead and underground power lines and cables, insulators, conductors, lightning arrestors, switches, transformers, street lighting and other associated equipment,
- work with various types of heavy equipment including ariel booms, diggers (RDB), backhoes, trackhoes, nodwells, tension stringing equipment, and skid steers, and
- splice, solder and insulate conductors and related wiring to connect power distribution and transmission networks.

When there is a power disturbance, failure, or storm damage, powerline technicians locate the source of the problem, and replace or repair defective power lines and accessories. They use wiring diagrams, voltage indicating devices, and other electrical-testing instruments to identify defective automatic sectionalizing devices, circuit breakers, fuses, voltage regulators, transformers, switches, relays, or wiring. The power lines may be de-energized and grounded, or may remain energized. Live-line maintenance techniques are used on energized power lines. The hazards of working with energized power lines are reduced by use of special equipment and training with safe work practices and procedures.

What kind of working conditions can I expect?

Powerline technicians work outdoors at various work sites so travelling is often part of the work day. The work may be

Eligibility Requirements

Entrance Exam – Pass Exam 5 with a score of 70% or higher

or

Completion of the following high school courses

- English 20-2 (pass) or Literacy 30 (pass)
- Math 10C (pass)
- Science 10 (pass)

or

All five Canadian General Educational Development (GED) tests

SCHOOLS NORTH APPRENTICESHIP PROGRAM (SNAP) - SNAP apprentices are not required to satisfy the entrance requirements prior to signing an apprenticeship contract. However, the SNAP apprentice must satisfy the entrance requirements **or** write the TEE before attending technical training.

strenuous and require frequent heavy lifting, carrying and reaching. Getting to power lines requires climbing poles or towers, working from a bucket attached to an aerial lift boom, and entering manholes and underground vaults. Shift work may be required. Although a 40-hour work week is normal, in emergencies linemen may be called upon at any hour and in any weather.

What are some skills that are valued in this profession?

- good physical coordination and manual dexterity,
- strength, stamina and the use of proper lifting techniques for items over 25 kilograms,
- · mechanical ability,
- good hearing and colour vision,
- the ability to work at heights and in varying extreme climates,
- · the ability to work in confined spaces, and
- the ability to work as a member of a team and adapt to changing tasks and locations.

What is the minimum requirement to become an apprentice in this trade?

Apprentices must obtain a minimum of 70% on the Trades Entrance Exam – TEE Category #2 or the equivalent education as outlined below. This must be done before signing the Apprenticeship contract and attending training.

How long will it take to complete a Powerline Technician apprenticeship?

An apprenticeship takes about four years to complete and includes four on the job and three technical training periods. You need to complete 1800 hours per period, for a total of 7200 hours.

How long is technical training?

Apprentices will attend 630 technical training hours. Apprentices usually go to school for this program in **Alberta**.

Period	Technical Training ¹	Prerequisites for technical training	Hours ²
1st	7 Weeks 210 hours	Entrance Exam and 900 hours	1800
2nd	7 Weeks 210 hours	Completed 1 st Period	3600
3rd	7 Weeks 210 hours	Completed 2 nd Period	5400
4th	n/a	Completed 3 rd Period	7200

¹Length of In-School Training

²Minimum Time Required to Complete (Includes Technical Training)