



# Construction Electrician

Electricians in this unit group lay out, assemble, install, test, troubleshoot and repair electrical wiring, fixtures, control devices and related equipment in buildings and other structures.



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EAST COAST TRADES COLLEGE

## What are the employment requirements for working in this trade?

- Completion of secondary school is usually required.
- Completion of a four- to five year apprenticeship program is usually required.
- Trade certification for construction electricians is compulsory in Newfoundland and Labrador, Nova Scotia, Prince Edward Island, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan and Alberta and available but voluntary, in British Columbia, the Yukon, the Northwest Territories and Nunavut.
- Trade certification for electricians (domestic and rural) is compulsory in Newfoundland and Labrador and Ontario.
- Trade certification for electrical control (machine) builders is available, but voluntary, in Ontario.
- Red Seal endorsement is also available to qualified construction electricians upon successful completion of the inter provincial Red Seal examination.

## What types of jobs can I obtain after completing this program?

- Apprentice construction electrician
- Apprentice electrician
- Building construction electrician
- Building electrician
- Construction and maintenance electrician
- Construction Electrician
- Construction Electrician apprentice
- Domestic and rural electrician
- Electrical fixtures installer
- Electrical wiring installer - construction
- Electrician
- These are job a few of the many jobs that you could obtain, please refer to the National Occupation Classification for more job titles.

## Where can Construction Electricians be employed?

They are employed by electrical contractors and maintenance departments of buildings and other establishments, or they may be self employed.



## Course Outline:

- Safety
- Tools & Equipment
- Access Equipment
- Hoisting, Lifting and Rigging
- Support Components
- Communications and Trade Documentation
- Mentoring I
- Drawings, Schematics and Specifications I
- Worksite Preparation and Organization
- DC Theory
- DC Circuits
- Single-Phase AC Theory
- Single-Phase AC Circuits I
- Introduction to the Canadian Electrical Code
- Grounding and Bonding I
- Single Phase Services
- Single Phase Power Distribution Equipment
- Conductors and Cables
- Raceways
- Boxes and Enclosures
- Wiring Devices
- Luminaries and Lighting Controls
- Introduction to Communication Systems

## What type of work do Construction Electricians do?

- Read and interpret drawings, circuit diagrams and electrical code specifications to determine wiring layouts for new or existing installations.
- Pull wire through conduits and through holes in walls and floors.
- Install brackets and hangers to support electrical equipment.
- Install, replace and repair lighting fixtures and electrical control and distribution equipment, such as switches, relays and circuit breaker panels.
- Splice, join and connect wire to fixtures and components to form circuits.
- Test continuity of circuits using test equipment to ensure compatibility and safety of system, following installation, replacement or repair.
- Troubleshoot and isolate faults in electrical and electronic systems and remove and replace faulty components.
- Connect electrical power to audio and visual communication equipment, signalling devices and heating and cooling systems.
- Conduct preventive maintenance programs and keep maintenance records.

\*All information provided in brochures are subject to change. Please verify with College for exact costs or changes to course outline.





### How Our Program Works:

This 32 week program provides 3 weeks in class of essential skills and safety training. After that you are only in class 2 days per week the other 3 days you are getting hands-on experience right out in Industry working side by side with a licensed technician.

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Come Together"

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### Tuition Referral Rebate:

Apply, get accepted, refer a friend to any one of our programs, you both graduate on Graduation Night you will receive \$500 Tuition Rebate.

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