

CONSTRUCTION

NOC 7241

CONSTRUCTION AND MAINTENANCE ELECTRICIAN (T.Q.A.A. , compulsory certified trade, Branch 1)



WORK DESCRIPTION

What would I be doing?

Construction and Maintenance Electricians perform numerous tasks:

- lay out, assemble, install, repair, maintain, connect or test electrical systems,
- plan installations from blueprints, interpret specifications, and install all electrical and electronic devices,
- diagnose faults in electrical systems and components,
- measure, cut threads, bend, assemble and install conduits and other conductor enclosures,
- test electrical and electronic equipment for proper function.

In general, Construction Electricians work days. Maintenance Electricians can expect to work shifts. They may work overtime to finish a project, especially on construction jobs. The work involves lifting and physical strength. Electricians must pay close attention to safety because the work presents many hazards. Electricians work both indoors and outdoors.

PLACE OF WORK

Who needs electricians?

- developers on construction sites,
- maintenance contractors,

- large organizations such as resource company or manufacturer,
- School Boards, colleges and universities.

CONDITIONS OF WORK

A Construction and Maintenance Electrician is a compulsory certified trade. A person must have a valid Certificate of Qualification or be registered as an apprentice to work in the trade. Under TQAA, for **compulsory Trades**, the Cooperative Education Student **may be a registered apprentice and may be paid** according to the Regulations.

SALARIES/WAGES

The salary of the Construction and Maintenance Electricians depends on the employer. The rate of wages for an apprentice is a specified percentage of a journeyperson's wage according to

In the Elgin, Middlesex and Oxford area, Construction and Maintenance Electricians can earn \$ 15.15 - \$ 25.03 per hour, averaging \$ 23.31 per hour.

(Next)

PROSPECTS of EMPLOYMENT in the Elgin, Middlesex and Oxford area

RATING: good

The electrician trade could experience a shortage of workers, since the majority of the workforce is over 45 years of age.

APPRENTICESHIP IN THE CONSTRUCTION AND MAINTENANCE ELECTRICIAN TRADE

- takes 4 to 5 years or 9000 h, (including 840 h of in-school training), prior education and experience may shorten the time to complete all the competencies,
- must pass the Certificate of Qualification exam to receive both a Certificate of Apprenticeship and a Certificate of Qualification with journeyman status,
- offers an Interprovincial Trade Certification (Red Seal).

In-School Education:

An OYAP student must be 16 years old and have completed Grade 10 (or equivalent). Otherwise, Grade 10 is the minimum requirement, however, completion of Grade 12 (OSSD) is advantageous. The following competencies are valuable:

English, *Communication and*
Mathematics, *planning skills,*
Physics, *problem-solving skills*
Design Technology (Drafting)
Construction Technology

OYAP students must be full-time students in high school and those who obtain apprenticeships will complete the apprenticeship curriculum in college or an approved Training Delivery Agent.

Specific skills learned in school are: safety, electric code, trade calculations, blueprints and installations, estimating, hand tools, trade communication, construction layouts, electrical-electronic theory, installation methods, drive systems, fire alarm and

building systems, electrical equipment maintenance, control systems, power distribution.

On the Job Training

- As a high school Cooperative Education credit (towards O.S.S.D.), learning is connected to one of the school subjects.
- The apprentices must follow a program in the **Apprenticeship Training Standards** book which is given to them in the workplace when they register. As each competency is achieved the employer signs it off.

OPPORTUNITY TO GROW

A Certificate of Qualification or a registration as an apprentice is required to start working in the electrical trade. A journeyman, Construction and Maintenance Electrician, may:

- become a foreperson or a supervisor,
- start own business as a contractor,
- work as a construction inspector,
- work in related areas or occupations.

RELATED OCCUPATIONS

- Power System Electrician,
- Communication Electrician,
- Power Lineperson,
- Domestic and Rural Electrician.

CONTACT INFORMATION

Whom should I call?

School Guidance/Co-Op Office
Apprenticeship Office 519 675 7788
London: 1 800 265 1050
Apprenticeship web: www.edu.gov.on.ca
EMOLTB web site: www.localboard.on.ca
Training Hotline: 1 800 387 5656
Union: International Brotherhood of
Electrical Workers Local 120
519 451 0654(5)