

# INDUSTRIAL

# NOC 7242

## ELECTRICIAN-INDUSTRIAL (A.C.A., non-restricted certified trade)



### WORK DESCRIPTION

*What would I be doing?*

Industrial Electricians perform numerous tasks involving heavy industrial electric machines:

- lay out, assemble, install, repair, maintain, connect or test electrical systems and controls,
- plan installations from blueprints, interpret specifications, and installs all electrical equipment and machines,
- diagnose faults in electrical systems and components,
- measure, cut, splice, and bend conduits,
- test and repair electrical and electronic equipment.

In general, Industrial Electricians work shifts. The work involves a lot of standing up. Electricians must pay close attention to safety because the work presents many hazards. Electricians work primarily indoors.

### PLACE OF WORK

*Who needs electricians?*

- manufacturing plants,
- light to heavy industry,

- marinas,
- mills,
- factories and plants

### CONDITIONS OF WORK

**An Industrial Electrician is a non-restricted certified trade.**

A person does not have to have a valid Certificate of Qualification to work in the trade. A registration as an apprentice is recommended. A Cooperative Education student, who is not a signed apprentice, does not have to be paid. An apprentice **may** be paid wages.

### SALARIES/WAGES

The salary depends on the employer, years of experience, and level of training. In unionized places the wages and conditions of work are negotiated collectively.

**In the Elgin, Middlesex and Oxford area,  
Industrial Electricians can earn  
\$ 20.72 - \$ 22.50 per hour, averaging  
\$ 21.16 per hour.**

(Next)

## PROSPECTS of EMPLOYMENT in the Elgin, Middlesex and Oxford area

### **RATING: good**

If you have experience with programmable logic controllers and robots then you greatly improve your chances of finding employment.

## APPRENTICESHIP IN THE INDUSTRIAL ELECTRICIAN TRADE

- takes 4 to 5 years or 9 000 h, including 720 h of in-school training; prior education and experience may shorten the time to complete all the competencies,
- must complete apprenticeship to receive a Certificate of Apprenticeship,
- must pass the Certificate of Qualification exam to receive a Certificate of Qualification with journeyman status,
- Interprovincial Trade Certification (Red Seal) is available.

### **In-School Education:**

An OYAP student must be 16 years old and completed Grade 10 (or equivalent). Otherwise, all apprenticeship applicants must successfully complete Grade 12 (OSSD) or equivalent.

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

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, trade communication, construction layouts, electrical-electronic theory, installation methods, fire alarm and building systems, 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 as an Industrial Electrician is not required to start working in the electrical trade but a registration as an apprentice is recommended. After becoming a journeyman an electrician may:

- become a foreperson or a supervisor,
- work as an industrial inspector,
- work in related areas or occupations.

### **RELATED OCCUPATIONS**

- Power System Electrician,
- Power Lineperson,
- Construction and Maintenance Electrician,

### **CONTACT INFORMATION**

*Whom should I call?*

School Guidance/Co-Op Office/Technology teacher

Apprenticeship Office 519 675 7788  
London: 1 800 265 1050

Apprenticeship web: [www.edu.gov.on.ca](http://www.edu.gov.on.ca)

EMOLTB web site: [www.localboard.on.ca](http://www.localboard.on.ca)

Training Hotline: 1 800 387 5656

Union: