

**Electrical Contractors Association  
of British Columbia**



**Electrician  
How to become one**

**A “Tool Kit” for guidance in  
becoming an electrical apprentice.**

### Disclaimer

**This information is meant to guide in the process of becoming an electrical apprentice. ECABC does not endorse one program over the other.**

**All references to educational facilities that offer electrical training is public information.**

Contact information for:

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Website: [www.eca.bc.ca](http://www.eca.bc.ca)

You can also download this file from our website:

[www.eca.bc.ca/education.php](http://www.eca.bc.ca/education.php)

Also on this webpage is a 6 minute video clip showcasing some journeymen electricians some and contractors.

## **Job Description**

An Electrician is a person who installs, constructs, alters, repairs, maintains, commissions, tests, services, calibrates, and operates related electrical and electronic systems in any premise, place, building or structure. They ensure that the entire electrical installation is safe and satisfies the requirements of the Canadian Electrical Code.

Because electricity is used for an extensive variety of purposes including lighting, power distribution, transportation, climate control, security, communications, etc., Electricians need to be proficient in the many applications of electricity. Electricians are employed by electrical contractors, utilities, maintenance departments of large institutions such as hospitals and industrial plants, or they may be self-employed.

Working conditions for construction Electricians will vary depending upon the type and stage of the project. A majority of the work is outside as the project progresses and as the outer shell of the structure is completed, the tasks move to the interior. Safety is the key because of the various hazards present on a construction site safe work practices must be followed. Electricians will be required to interpret architectural drawings and electrical code specifications at the construction site.

Industrial Electricians employed by heavy industry, such as pulp mills, mines and smelting operations, work with large electrical motors and massive power supplies. Some Electricians specialize in restorative, insurance or retrofit work rather than new construction.

## **Long Term Prospects**

Throughout BC, it is estimated that there are about 6,500 workers in this large occupational group.

Construction electricians are subject to the normal fluctuations of the construction industry. An electrician with well-developed skills will definitely be a sought after tradesperson. So, get ready, get trained, and look forward to a fulfilling career as an Electrician! Long term growth is expected.

## **Money**

An electrician can easily make \$40,000 to \$60,000 per year. Hourly wages may vary but the average journeyman earns approximately \$24 per hour.

Wages can be dependent on performance, so if you are a highly skilled electrician in a leadership role, you will likely have a higher wage. In collective bargaining units, performance dictates your long-term employability.

## **Getting Started**

Finding a job is key to participating in an apprenticeship program. Your employer's cooperation is required to complete an apprenticeship as an electrician. If you feel that your skills do not match what is expected of an entry-level worker in this trade, your next step would be to seek pre-apprenticeship or entry level training at a recognized educational institution.

Generally, people employed as electricians should have good mathematical and mechanical skills, as well as an analytical approach to problem-solving, physical strength, manual dexterity and good hand-eye coordination. Additional skills include an ability to read and interpret drawings and electrical code specifications. electricians should be computer literate and be able to work efficiently with hand tools.

Since electrical wires are colour-coded, good eyesight and colour vision are also vital. Electricians should be able to work alone as well as a member of a team. Those who install or maintain equipment in homes or businesses must be neat and able to deal with customers courteously. To remain competitive in this field, it is essential that workers be willing to continually upgrade their skills.

A Grade 12 or equivalent education including English 12, Mathematics 12, and Physics 11 is recommended.

### **Where to get the Training & education**

The following BC educational institutions offer both entry level and apprenticeship training:

[British Columbia Institute of Technology](http://www.bcit.ca)  
(www.bcit.ca)

[Camosun College](http://www.camosun.bc.ca)  
(www.camosun.bc.ca)

[College of New Caledonia](http://www.cnc.bc.ca)  
(www.cnc.bc.ca)

[North Island College](http://www.nic.bc.ca)  
(www.nic.bc.ca)

[Selkirk College](http://www.selkirk.bc.ca)  
(www.selkirk.bc.ca)

[University College of the Cariboo](http://www.cariboo.bc.ca)  
(www.cariboo.bc.ca)

[University College of the Fraser Valley](http://www.ucfv.bc.ca)  
(www.ucfv.bc.ca)

### **Certification**

[BC Certificate of Apprenticeship](#)

[BC Certificate of Qualification](#)

[Interprovincial Red Seal](#)

Find all three of these on this website.

[www.learnandearn.bc.ca/pls/trades/trade](http://www.learnandearn.bc.ca/pls/trades/trade)

To work as an electrician in BC, it is mandatory to either hold a Certificate of Apprenticeship or Qualification in the trade, be registered in a four-year apprenticeship that will lead to certification and be working under a certified electrician.

The electrician apprenticeship process requires time spent on the job and in school training. An electrician trainee must complete a four (4) year program including 6,000 workplace hours and 1,200 in-school hours of training. After completion of training, a passing grade on the Inter-provincial exam will result in the BC Certificate of Apprenticeship, BC Certificate of Qualification, and the Inter-provincial Standard Endorsement, also known as Red Seal.

A challenge process exists for individuals who have completed an apprenticeship in another province or country. With verified previous experience, applicants with a passing grade on the examination will receive a BC Certificate of Qualification and the Inter-provincial Standard Endorsement, also known as Red Seal.

### **What the future may hold**

Due to the rapid pace of technological change there are always new and interesting opportunities occurring in the electrical industry.

Work performed by electricians has expanded to include alternate energy supplies such as solar power, wind power and fuel cells, wiring for smart homes and automated systems for high tech industries and complex computer offices.

Opportunities exist in the construction, mining, forestry, food production, manufacturing, grain handling, transportation, utility and service industries. The nature of the trade has changed with the impact of solid-state control and programmable logic controllers. Challenging careers are available to individuals who are prepared to acquire a broad range of technical skills.

Becoming an electrician is a life long learning process. You can have a long successful career as an electrician, or you can pursue other career paths within the field such as, project management, electrical estimating, electrical inspection, educator, etc.

### **Eight Tips to Pursuing an Apprenticeship** Courtesy of Kerry Jothen, CEO Human Capital Strategies™

#### **1. KNOW WHAT APPRENTICESHIP IS AND DO YOUR HOMEWORK**

- a.) Know what you are getting into and why.
- b.) If you are not already clear about it, get good, accurate information about apprenticeship – What it is? What is the range of options? What are the working conditions, wages, pre-requisite skills/experience, etc? Which trades are in greatest demand? How many entry level opportunities are there in these trades?
- c.) Look for trades in industries with large amounts of jobs, industries that are aging and will involve more retirements and vacancies, and smaller industries with fast growth rates.
- d.) Look for good websites.
- e.) Obtain information from industry and trades associations, unions, government program managers, post-secondary institutions.

#### **2. NETWORK AND GET ADVICE**

- a.) Use your relationships with parents, other relatives, friends, acquaintances, etc. to find out about the trades and apprenticeship, about job leads, etc.

- b.) Obtain advice on which trade to pursue, on finding an apprenticeship, etc.
- c.) Post-secondary institutions have trades departments and program advising centres that can help you find the right information and training options.

**3. BE PREPARED BEFORE YOU APPROACH EMPLOYERS**

- a.) Develop an effective resume that clearly puts forward your strengths as they relate to the trade you are pursuing. There are many resources for help with resumes such as the internet, books and local workshops.
- b.) Emphasize real world experience, even if it is not in the trade you are pursuing.
- c.) Ensure you have thought through what you want to say and how you want to appear when you get a chance to talk to an employer.

**4. USE THE PERSONAL TOUCH**

- a.) As much as possible, go to the job site and approach the employer in person – especially in construction and industrial job sites.
- b.) Have a good resume in hand, be appropriately dressed for work, and exemplify a positive attitude and passion for the trade.

**5. PERSEVERE AND FOLLOW THROUGH**

- a.) As with any job search, don't give up easily. Stick with it.
- b.) Learn from feedback and information you obtain from approaching employers.
- c.) This perseverance shows through to the employer and will project a positive image in subsequent approaches.

**6. EXEMPLIFY THE BASICS: ATTITUDE AND BASIC SKILLS**

- a.) The #1 priority employers look for in entry level jobs is a good attitude. Also, other basic employability skills (e.g. interpersonal skills, computer skills, literacy and mathematics, etc.) and safety and other special credentials make a difference.

**7. UPGRADE YOUR KNOWLEDGE AND SKILLS IF NECESSARY**

- a.) The trades are not for “dummies”. You need up to date math, communications and other academic knowledge.
- b.) High schools and post-secondary institutions have short, flexible (e.g. evening) academic upgrading courses you can complete before or during the start of your apprenticeship.
- c.) Consider short term training courses to obtain safety, health, customer services and other credentials.

- d.) If you do not directly enter an apprenticeship or other employment, you can improve your chances with a 4-10 month pre-employment entry level vocational program in an area related to the trade you are pursuing.
- e.) If you are still in high school, check out the Secondary School Apprenticeship Program.
- f.) There are also other high school programs through which you can obtain trades experience.

#### **8. BE FLEXIBLE & CUSTOMIZE YOUR APPROACH**

- a.) You won't necessarily find your ideal job. Be flexible in what you consider.
- b.) Be willing to start at the bottom of a career ladder to obtain practical experience.
- c.) Many employers hire new entry workers for labouring jobs to start and use this as a screening period, after which they offer an apprenticeship to those with the best attitudes and basics.
- d.) Customize your approach to the industry, trade, employer, site, etc.

#### **INDUSTRY TRAINING CENTRE**

For more information on Apprenticeship training in BC contact:

The Industry Training Centre  
Suite 223  
4600 Kingsway  
Burnaby, B.C.  
V5H 4L9

Toll free number: 1-866-660-6011

Or visit the industry training website at: [www.aved.gov.bc.ca/industrytraining](http://www.aved.gov.bc.ca/industrytraining)

If you would be interested in taking your apprenticeship with the International Brotherhood of Electrical Workers (IBEW), you may call the following for information:

#### **Lower Mainland Area**

Electrical Construction Industry Joint Training Committee  
4220 Norland Avenue  
Burnaby, BC V5G 3X2  
Tel: 604-571-6540

#### **Vancouver Island and BC Interior**

Western Joint Electrical Training Society  
145 – 12830 Clarke Place,  
Richmond, BC V6V 2H5  
Tel: 604-279-9920