Electrician, Apprenticeship

Electricians install, alter, repair and maintain electrical systems that are designed to provide heat, light, power, control, signals or fire alarms for all types of buildings, structures and premises. Experienced electricians may advance to supervisory, estimator, inspector positions, or start their own contracting businesses. Alberta certified journeyperson electricians who have the supervisory or management skills required by the industry may apply for an Achievement in Business Competencies Blue Seal by contacting Alberta Apprenticeship and Industry Training.

The Alberta Apprenticeship and Industry Training website [http://tradesecrets.alberta.ca/](http://tradesecrets.alberta.ca/) provides information on the process in becoming an apprentice, entrance requirements, training facilities and course dates provided in Alberta institutes.

What you can be with your Electrician Apprenticeship training:

<table>
<thead>
<tr>
<th>Electrician Contractor #7212</th>
<th>Alternate Energy Technologist #7441</th>
<th>Solar Installer #7441</th>
<th>Communication Technician #7246</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Estimator #2234</td>
<td>Home Inspector #2264</td>
<td>Industrial Construction Crew Supervisor #7217</td>
<td>Sales Representative (wholesale) #6411</td>
</tr>
<tr>
<td>Purchasing Agent #1225</td>
<td>Technical Sales Representative #6221</td>
<td>Security Alarm Installer #2242</td>
<td>College Instructor #4131</td>
</tr>
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</table>
| Powerline Technician #7244   | Power System Electrician #7243   | Project Management Professional #0711 | Lighting Technician #5226.3 |}

With additional education you could be:

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<tr>
<th>Safety Codes Officer (Electrical Safety Inspector) #2263</th>
<th>Career and Technologies Studies Teacher #4141</th>
<th>Occupational Health and Safety Advisor #2263</th>
<th>Home Inspector #2264</th>
</tr>
</thead>
</table>

This career/job listing is only a sample of the possible career options; these are certainly not the only career/job options accessible with this degree/diploma. Some of the careers listed require further education.

For career information, enter the four digit number listed below in the Alberta Learning Information Services Website ([www.alis.alberta.ca](http://www.alis.alberta.ca)) or the National Occupational Classification Website ([http://www5.hrsdc.gc.ca/NOC/](http://www5.hrsdc.gc.ca/NOC/)).

RDC Career Services can help you explore your interests, identify your goals, discuss your career options and job search strategies and discover how to make the most of your education. Email or give us a call to connect with a career counsellor.

**RDC Department Information: Electrician Apprenticeship** [rdc.ab.ca/programs/trades](http://rdc.ab.ca/programs/trades)
Major skills obtained from Electrician Apprenticeship training:

- **Reading** – Ability to read blueprints, specifications and sequence of operations when wiring controls, the ability to read and interpret the Canadian Electrical Code

- **Document Use** – Interpret safety documentation and record keeping, view meters and digital readouts

- **Numeracy** – Calculate the average amount of power being used in a building. Make calculations using angles, vectors and trigonometric constants. Use formulae, such as Ohm’s law, to design or modify electrical installations.

- **Writing** – Write and record safety reports, write purchase orders for material and required change orders. Write detailed descriptions of installations and repair procedures.

- **Oral Communication** – Negotiate with trades and suppliers, interact with other electricians and tradespeople to coordinate job scheduling and address safety concerns.

- **Working with Others** – Work frequently in pairs, work with other trades and suppliers, work as a team to promote safety; participate in discussions about work processes or product improvement.

- **Thinking** – refer to blueprints to obtain project information and analyze for errors, make decisions to use material and labour efficiently, make decisions for proper wiring techniques. Decide on how to route power, taking into account potential obstacles, customer specifications and code restrictions.

- **Computer Use** – Use computers to electronically access blueprints and project documentation using laptops, tablets and smart phones. Use software to control electrical equipment to aid in trouble-shooting equipment failure.

- **Continuous Learning** – Keep up-to-date with codes, regulations, standards, materials, technology advancements and emerging skills.

**Professional Associations and Sites of Interest:**

- Alberta Apprenticeship and Industry training- tradescrets.alberta.ca


- Canadian Home Builders’ Association-Alberta www.chbaalberta.ca

- Alberta Construction Association albertaconstruction.net

- BuildForce Canada www.buildforce.ca

- Electrical Contractors Association of Alberta http://www.eaca.ab.ca/

- Alberta Electric League http://albertaelectricleague.com/

- Red Deer Construction Association - www.reddeerconstructionassociation.com

- Red Deer College – www.rdc.ab.ca/employment

- City of Red Deer – www.reddeer.ca


Information adapted from www.alis.gov.ab.ca and www.tradescrets.alberta.ca