# Construction Electrician: Apprenticeship

Faculty of Trades and Technology	kpu.ca/trades
Electrical (Construction)	kpu.ca/trades/electrical
Implementation Date	01-Sep-2011
Start Date(s)	Varies
Admission Type	Apprenticeship
Enrolment Type	Limited enrolment
Program Type	Vocational
Credential Granted	No Credential
Offered At	Cloverdale
Format	Full-time
How to Register	www.kpu.ca/apprentice

#### **DESCRIPTION**

#### Get the skills that pay the bills!

In BC, an individual can become certified as a Construction Electrician by completing the Electrical apprentice program. Apprenticeship programs are designed to provide students the full scope of knowledge and applied skills necessary to perform the occupation. Apprentices have an employer to sponsor them and are registered with the Industry Training Authority (ITA).

KPU delivers in-school technical training for Electrical apprenticeship levels 1, 2, and 3. The in-school technical training for each level is 10 weeks in duration and includes an end of level examination. Additional information is available at: kpu.ca/trades/electrical.

The pathway to becoming a certified Construction Electrician generally takes 4 years to complete the in-school technical training and work-based training hours. Electrical apprentices will be eligible to write the Red Seal Inter-provincial Examination upon completion of all in-school technical training. Red Seal endorsement will be awarded upon completion of 6000 work-based training hours and is recognized in all jurisdictions across Canada; additional information is at: red-seal.ca.

# **Employment Insurance (EI) Eligibility**

Provincial program financial supports must be applied for online through the Apprentice Online Portal at http://www.apprenticeonline.gov.bc.ca/. It is recommended that apprentices apply for these supports four weeks in advance of the start of their technical training and application must be made no later than the first day of technical training.

#### **GENERAL PREREQUISITES**

The following requirements apply:

- Active apprentice registration in the BC Apprenticeship system.
- A valid Trade Worker Identification number from the Industry Training Authority (ITA-ID). If you do not have an ITA-ID, you will need to complete an apprenticeship registration form through the ITA (www.itabc.ca) prior to enrolling (Level 1 through to 4). To determine your eligibility please consult with the Industry Training Authority.

**Note**: International student enrolment requires approval of the Dean.

#### PROGRAM REQUIREMENTS

## **Electrical Level 1 (AELC 1010)**

- Electrical safety fundamentals
- DC circuits
- Electromagnetism & applications
- Meters & test equipment
- Electrical prints & drawings
- AC motor controls
- Electric code & wiring
- Industrial power electronics

#### **Electrical Level 2 (AELC 1020)**

- AC fundamentals
- Meters & test equipment
- Single phase AC circuits
- Circuit protector devices
- Single phase transformers
- AC motor controls
- Lighting
- Industrial power electronics
- Electric codes & wiring

#### **Electrical Level 3 (AELC 1030)**

- Three-phase Circuits
- Electronic Circuits
- Power Quality Analyzers
- Applying the CEC to Installations
- Installing Service Equipment
- Grounding and Bonding
- Distribution Centres
- Conductors and Cables
- Installing Devices
- Three-phase Transformers
- DC Motors and Generators
- AC Motors and Alternators
- Magnetic Motor Controls
- Electronic Motor Controls

## **Electrical Level 4 (AELC 1040)**

Under development

#### OTHER INFORMATION

## **Special Equipment**

Students will require approprate tools and safety wear in conformance with WorkSafeBC regulations that includes safety glasses, hard hat and steel toed boots.

#### CREDENTIAL AWARDED

KPU will report your in-school technical training completion information to the Industry Training Authority (ITA) in order for the ITA to determine credit towards your designated apprenticeship.