

ELECTRICAL - FOUNDATION TRAINING - HARMONIZED

View on YouTube (<https://www.youtube.com/watch?v=qEdMuT2W-j0>)

The Harmonized Electrical Foundation program prepares students for entry-level positions as electrical apprentices with contracting companies involved in residential, commercial and industrial construction and maintenance. Students learn to access and utilize resource materials, follow procedures and make sound decisions while installing and maintaining electrical equipment.

This 24 week program covers the Industry Training Authority (ITA) Level 1 Curriculum while allowing students extra time to develop hand skills in a shop setting. Construction Electricians plan, design, assemble, install, alter, repair, inspect, verify, commission, connect, operate, maintain and decommission electrical systems. Electrical systems provide heating, lighting, power, alarm, security, communication and control in residential, commercial, institutional, industrial transportation, marine and entertainment environments.

For the details on the scope of knowledge and skills taught in this program refer to the Program Outline, available on the ITA website: <https://www.itabc.ca/program/electrician-construction> (<https://www.itabc.ca/program/electrician-construction/>)

Apply to CMTN

Visit Apply to CMTN (<https://www.coastmountaincollege.ca/admissions/apply-to-cmtn/>) for an Admissions Checklist and to apply online.

Our Educational Advisors (<https://www.coastmountaincollege.ca/student-services/student-support/educational-advising/>) are here to help if you have any questions or need guidance along the way.

Dates and locations

Intake	Location
Electrical Foundation: September 3, 2024 - January 31, 2025	Terrace Campus
Electrical Foundation: February 3, 2025 - June 20, 2025	Terrace Campus
Electrical Foundation: September 2, 2025 - January 30, 2026	Terrace Campus
Electrical Foundation: February 2, 2026 - June 19, 2026	Terrace Campus

The full-time, 24-week program is theory and competency based.

Line	Course Name	Hours
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Line A	Apply Circuit Concepts	410 hr
Line B	Perform Safety-Related Functions	29 hr
Line C	Use Tools and Equipment	14 hr
Line D	Organize Work	72 hr
Line G	Use Communications and Mentoring Techniques	8 hr
Line H	Install and Maintain Consumer/Supply Services and Metering Equipment	29 hr
Line I	Install and Maintain Protection Device	14 hr
Line J	Install and Maintain Low Voltage Distribution Systems	14 hr
Line L	Install and Maintain Bonding, Grounding and Ground Fault Detection Systems	14 hr
Line Q	Install and Maintain Raceways, Cables and Enclosures	29 hr
Line R	Install and Maintain Branch Circuitry	58 hr
Line AA	Install and Maintain Communication Systems	29 hr

Total Program hours 720 hr

- Grade 12 Graduation Required **or** Mature Student,
- 4 credits (2 courses) at English Studies 10, English First Peoples 10 level or equivalent, and
- Any one of the following:
 - Foundations of math 11,
 - Workplace math 11,
 - Pre-calculus 11 or higher, or
 - Equivalent Math, ACCUPLACER or CAT
- Physics 11 recommended

Unless otherwise noted, "Permission of Instructor" may be used to accept a student into a course(s) when the student does not meet course prerequisites and/or does not attain the required threshold on entry assessments. See the Admission and Registration (<https://coastmountaincollege.ca/admissions/overview/>) section on the website for details on this policy.

Learners should be aware that many employers require Grade 12 completion.

Trades learners are encouraged to enhance their employability by enrolling in Occupational First Aid (OFA) Level 1 (<https://www.coastmountaincollege.ca/programs/discover/continuing-studies/>)



first-aid-health-safety/occupational-first-aid-level-1/). OFA courses are scheduled throughout the year at CMTN.

Complete a CMTN Bursary Application (<https://coastmountaincollege.ca/student-services/financial-aid/cmtn-awards-bursaries-scholarships/>) [PDF]

Fees	Domestic	International
Full Time:	24 Weeks	24 Weeks
Tuition:	\$1,967.04	
Student Union Fees:	\$112.76	
Mandatory Fees:	\$562.08	
Health Insurance:	N/A	
Tuition and Fees Total:	\$2,641.88	
Classroom Supplies:	\$100.00	
Tools:	\$650.00	
Required PPE:	\$425.00	
Total Program Cost:	\$3,816.88	

Fees are effective as of August 1, 2025 for the 2025/26 academic year.

Books & supplies

- Tool List (<https://coastmountaincollege.ca/docs/default-source/program-forms/electrical/electrical-student-supplies-list9a6fbf391b316d6b9fc9ff00001037d2.pdf>) \$650.00 Approximately
- Book List (<https://www.coastmountaincollege.ca/docs/default-source/program-forms/electrical/electrical-foundation-booklist-2019.pdf>)

Books are available at the CMTN Bookstore (<https://coastmountaincollege.ca/student-services/campus-facilities/bookstore/booklists/>).

Tool kits are available for purchase at the registration office. Kits are limited and reserved for students enrolled in specific Trades programs only. Tool kits do not include the required PPE and Supplies on the TOOLS/SUPPLIES LIST. Prices are subject to change without notice.

In addition to the fees outlined in the Program Fees section, the following additional costs apply:

- Purchase of necessary learning resources (available at the CMTN Bookstore)
- Personal Protective Equipment
- Classroom Supplies
- Appropriate clothing
- Tools

Career opportunities

A growing need for electricians has been identified in northwestern BC as resource development opportunities increase and as older workers begin to retire from existing positions in established industries. Graduates find employment as electrical apprentices installing and maintaining lighting, heating, control, alarm, data and commercial systems in residential, commercial and industrial settings and numerous other related fields.

