Renewable Energy Electrical Systems Installation and Maintenance

School of Construction and the Environment







BCIT prides itself in being a provincial leader of trades training providers. BCIT's graduates are well recognized by industry as being fully equipped with skills and experience necessary for the career they choose. Graduates will be job-ready by embodying the theoretical through authentic practice. The photovoltaic installations, micro-hydro test bed, renewable energy and programmable controller labs at BCIT's Burnaby campus in Building SE1, offer the students a unique opportunity to experience real-world, hands-on practical systems training through exposure to physical energy production and capture scenarios.

The program appeals to learners who enjoy change and adapting to new technology and want to seize the opportunity to take positive action to ensure an improved future environment. This program emphasizes hands-on, practical training, using equipment typically encountered in the renewable energy industry.

Job Opportunities

The Advanced Certificate in Renewable Energy Electrical Systems Installation and Maintenance will supply industry with electricians and electrical engineering practitioners who have advanced knowledge of renewable energy system installations and who are able to liaise with renewable energy systems vendors to integrate project elements as well as providing ongoing service for existing systems. It is expected that the trade sector will drive economic growth in British Columbia, with an accompanying growth in energy demand. The energy sector will require more competent technical people. The program aims to provide courses that are relevant and responsive to the current and future industry and labour market needs.

Entrance Requirements

This program has a two-step admission process. Applicants must meet all entrance requirements and will be accepted on a first come, first served basis as long as space remains.

British Columbia Institute of Technology 3700 Willingdon Avenue, Burnaby, British Columbia V5G 3H2

More information: BCIT_REESIM@bcit.ca | bcit.ca/reesim



Step 1: Pre-entry assessment

Applicants are required to complete a pre-entry assessment form to review their work experience and how they meet the entrance requirements.

Applicants that do not meet all entrance requirements may receive a study plan indicating required pre-entry courses.

Step 2: Meet the following entrance requirements

- English: two years of education in English in an English-speaking country with one of the following: English 12 (67%) or three credits of post-secondary English, Humanities or Social Sciences (67%) from a recognized institution
- Math 11 (67%)

Entry options: one of the following:

Option 1: Interprovincial Red Seal qualified electrician

Option 2: Electrical engineering practitioner with BC Safety Authority Field Safety Representative (FSR) Class A or B

Program Length

The maximum time to complete this program is 7 years.

Program Matrix

Required Courses:		Credits
REES 5010	Programmable Relays and Analog Devices	3.0
REES 5020	Elements of Renewable Energy Systems	3.0
REES 5030	Programmable Logic Controllers	3.0
REES 5040	Variable Frequency Drives & Electrical Machines in Renewable Energy Systems	3.0
REES 6010	Installation of Fluid-driven Renewable Energy Systems	3.0
REES 6020	Installation of Geothermal & Solar Thermal Renewable Energy Systems	3.0
REES 6030	Energy Storage and Fuel Cells	3.0
REES 6040	Installation of Photovoltaic Renewable Energy Systems	3.0

Total Credits: 24.0

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