

## Program Overview

St. Clair College and  (Renewable Energy Technology Center, Windsor) are proud to provide a new program developed by the Ministry of Training, Colleges & Universities, in partnership and consultation with representatives from industry.

This 42 hour, in-school program is a voluntary new skill updating program. **Note: trainees will NOT receive credit towards apprenticeship for this offering.**

This training is available FREE OF CHARGE to:  
Journeypersons, Apprentices and Certificate of Qualification applicants in the following trades:

- Construction & Maintenance Electricians (309A)
- Domestic & Rural Electrician 309C
- Power line technician 434A
- Industrial Electrician 442A

## Session Details

Dates: March 18-20; 25-27th

Days: Fri, Sat, Sun.

Times: Fri: 5-10PM,  
Sat/Sun: 8am-5pm

Where: St. Clair College for 4 sessions (Room 2001 of the Ford Centre of Excellence);

2 sessions will be held at the RET Center, Windsor, 1680 Kildare Road, Windsor, ON.

**Course Cost:**  
Free tuition to C of Q skilled tradespersons.

For more details contact:  
Sandy de la Penotiere  
519-972-2727, ext. 5226  
sdelapenotiere@stclaircollege.ca

## Training Outcomes

Upon completion of this course, trainees will be able to:

- Solar PV Systems
  - Describe parameters of solar energy as a fuel source including irradiance, temperature, peak sun hours.
  - Explain the photovoltaic effect
  - Describe the components of a solar electricity system
  - Describe the performance parameters of solar PV equipment
- Codes, Standards & Regulations
  - Identify permits required for solar PV installation
  - Interpret codes, regulations and standards that apply to solar PV installation.
  - Describe hazards and risks according to standards, regulations and codes.
- Site Safety
  - Describe workplace health and safety protocols
  - Explain PPE practices for solar PV installation
  - Describe protection controls to eliminate hazards and risks
  - Identify certification requirements for personnel and equipment.
- Project Planning
  - Interpret site survey, design, project plan and manufacturer's specifications.
  - Explain equipment used in installing solar PV systems including material handling and personnel access equipment.
- Print Reading
  - Interpret conceptual drawings and designs for physical implementation.
  - Demonstrate measuring and layout using reference points.
  - Describe properties of structural elements to verify location & mounting.
- Support Systems and Penetrations
  - Explain procedures for mechanical assembly of support systems and penetrations.
  - Explain civil installations such as trenching, footing and ballasts.
- Grounding & Bonding
  - Select method and materials for system ground
  - Describe methods and materials for protecting grounding and bonding elements from galvanic corrosion.
  - Describe methods and materials for lighting and surge protection.
- Solar PV Modules
  - Describe mounting techniques for solar PV modules.
  - Explain mounting positions including orientation and tilt angles.
  - Describe circuit connections.
- Inverter and BOS
  - Describe inverter and BOS mounting techniques
  - Describe circuit connections for input and output and AC and DC
  - Select wiring methods and materials.
  - Explain mounting and wiring techniques for inverters and BOS
- Distribution systems Overview
- Metering Equipment
  - Describe types, specifications & capacities of metering equipment.
  - Describe installation techniques for metering equipment
- Storage Battery & Charge Controllers
  - Explain storage batteries and charge controllers
  - Explain load utilization for a storage battery system.
  - Explain safety precautions for handling, installing and maintaining storage batteries.
  - Select wiring methods and materials, and MORE.....

Only 30 seats available – Fax your registration to 519-945-0747, Attn: Sandy