

Contest Description Electrical Installations Post-Secondary

April 11, 2025	NSCC Sydney Waterfront Campus
TIME	TASK
7:15 am	Orientation (mandatory)
7:30 am	Competition begins
11:30 am	Lunch (provided)
12:00 pm	Competition resumes
2:00 pm	Competition end & judging begins

^{*}There will be a 15 minute break provided

1. Purpose of the Contest

Assess the competitor's skills and abilities at performing various installation tasks in the field of electrical residential, commercial and industrial wiring.

2. Criteria

There is a 6 hour time limit for this competition.

The first person to complete, however, may not be the winner. If the time expires you will be marked on what you have completed. If time allows, the competitor is permitted to redo any skills that they may improve marks. Judging will commence when the contestant has left the contest area or the time limit has expired.

All work must be completed according to the current CEC specifications and diagrams/blueprints provided the morning of competition. Quality of work, including neatness, and compliance with rules and regulations will be evaluated.

3. Number of Stations

There are ten (10) stations.



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4. Skills & Knowledge to be Tested

Throughout the final contest, contestants can expect to be evaluated in the following areas:

- Installation of residential wiring
- Installation of device boxes
- Installation of branch circuit wiring
- Installation of commercial wiring
- Panel tie in
- Installation of heating equipment and controls
- Installation of motor control
- Print reading and document use
- EMT Conduit installation
- Installation of electrical devices
- Installation of low voltage control
- Install of trimwork (switchplates, panelcovers)
- Safe work practices

Tasks that may be performed during the contest. Contestants must demonstrate mastery of the following technical skills:

- Measuring and marking dimensions on a work surface using scale plans and drawings based on the metric or imperial measuring system;
- Measuring and accurately marking the location of outlets, switches and panelboards
- Installation of residential circuits
- Installation of extra low voltage control
- Installation of residential heating system
- Installing electrical equipment, cables, conduit, tubing and raceways;
- Measuring and bending conduit
- Reading, interpreting and executing plans, drawings, diagrams and schematics in compliance with the current addition of the CEC
- Installation of basic motor controls
- Installation of a panelboard



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5. Prerequisites

Contest Specific Prerequisites

- Measuring and marking dimensions on a work surface using scaled drawings.
- Installing electrical equipment, cables, conduit and raceways.
- Measuring, cutting, reaming, and drilling.
- Assembling components using screws, staples and bolts.
- Wiring and connecting of electrical components.
- Read, interpret and execute plans, drawings, diagrams and schematics in compliance with standards.
- Knowledge of safe work practices
- Knowledge of electrical materials.
- Knowledge of basic electrical circuits.
- Knowledge of OH&S standards and regulations.
- Knowledge of the 2021 Canadian Electrical Code requirements

SCNS Prerequisites

- Post-Secondary competitors must meet the following criteria in the current school year:
- Be enrolled in a community college, university, private school OR be a registered apprentice with the Department of Labour and Advanced Education (Apprenticeship Agency);
- Be registered as a competitor with Skills Canada Nova Scotia;
- The competitor cannot be a certified journey-person;
- Possess Canadian citizenship or Permanent Resident (Landed Immigrant) status and be a resident of Nova Scotia; or be a registered International Student. Competitors are responsible for verifying this information if requested;
- Have been earning post-secondary credits in a sector relevant to the one in which
 they wish to compete (i.e. to compete in carpentry, the student would be earning
 credits in any construction-related trade) at any time during the academic school year
 (September to June);
- All competitors must be able to show either current apprenticeship status and/or proof of enrollment in a post-secondary institution upon request of the Provincial Technical Committee (PTC) or Skills Canada Nova Scotia.
- Have completed and submitted a signed release form

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6. Equipment & Clothing

Appropriate, professional clothing (no shorts or ripped pants or sleeveless shirts), a Skills Nova Scotia T-Shirt will be supplied the morning of competition, that the competitor will be required to wear during the competition.

The competitor must bring:

- CSA approved steel toe boots or shoes
- CSA approved eye protection
- Appropriate Work pants
- Work gloves

What Equipment Will Be Supplied:

- -EMT Benders
- -Cordless Drills and Drivers

What Competitors Must Supply:

All basic hand tools including but not limited to screwdrivers, various pliers, knife (must be either a locking blade or straight blade, absolutely no razor/box cutting knives), hammer, hack saw, metric/standard tape measure, level, **driver bits and ship auger bits** or spade bits ,pencil, Canadian Electrical Code 2021 and PPE

7. Evaluation & Judging Criteria

The points allowed for the completion of the varying skills demonstrated in the practical test are allocated as follows:

Safety (Electrical and Personal)	10 %	
Housekeeping		5 %
Professional attitude	5 %	
Competition installation	80 %	
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Total	100 %	

In the event of a tie the winner will be the competitor who completed in the least amount of time.

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8. Additional Information

This competition begins promptly at 7:15 am, please allow yourself time to find parking and make your way to your competition area.

9. PTC Contact Information

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