



2024 South West Regional Skills Canada Competition

Contest Description (Scope Document)

Lethbridge College

Saturday, March 16, 2024

EVENT: ELECTRICAL INSTALLATION	LEVEL: Secondary										
DURATION OF CONTEST: 6 HOURS	LOCATION: Lethbridge College TT1951										
COMPETITION SCHEDULE: <table border="1"> <tr> <td>CHECK IN (FOUNDERS' SQUARE)</td> <td>7:10 A.M.</td> </tr> <tr> <td>ORIENTATION</td> <td>7:30 A.M.</td> </tr> <tr> <td>COMPETITION BEGINS</td> <td>8:00 A.M.</td> </tr> <tr> <td>LUNCH</td> <td>12:15 – 12:45 P.M.</td> </tr> <tr> <td>COMPETITION ENDS</td> <td>2:30 P.M.</td> </tr> </table>	CHECK IN (FOUNDERS' SQUARE)	7:10 A.M.	ORIENTATION	7:30 A.M.	COMPETITION BEGINS	8:00 A.M.	LUNCH	12:15 – 12:45 P.M.	COMPETITION ENDS	2:30 P.M.	REGIONALIZED: NO
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AWARDS CEREMONY INFORMATION: The awards ceremony will be held at 4:00 p.m. in the Swing Room (AN1804). It is open to the public, and parents are encouraged to attend.											

CONTEST INTRODUCTION

The purpose of the Secondary Electrical competition is to provide high school students (referred to as secondary competitors) with an opportunity to compete with their peers in the practical application of the Canadian Electrical Code. It is understood that secondary students have not had the opportunity to attend post-secondary electrical training. However, many students are able to learn electrical skills via their high school programs, work experience(s) and/or RAP placements.

SKILLS AND KNOWLEDGE TO BE TESTED

- Interpreting and using basic electrical design & diagrams of a physical facility
- Wiring (AC90 & NMD) a sub panel and various branch circuits using standard trade practices, complying with relevant sections of the current CEC. Wiring will be fished/pulled to various circuits.
- Basic conduit bending. (EMT) may include offsets, saddles, 90 degree bends and strapping.
- Determining adequate protection for equipment and components.

PROJECT DESCRIPTION

Competitors will be introduced to basic skills of the electrical wiring trade. They will interpret and use basic electrical design and diagrams, wall mount a panel, and determine the adequate protection for equipment and components.

Please see the attached practice print released along with the contest description. On the day of the Regional Competition, competitors will be provided the actual Competition Plans which may be changed from the practice set.

EQUIPMENT AND MATERIALS COMPETITORS MUST SUPPLY:

Pencil	Measuring tape (metric)	Side cutters
Long nose pliers	Flat screwdrivers	Water pump pliers
Hacksaw and blades	Linesman pliers	Crescent wrench
Claw hammer	Robertson screwdriver(black/red/green)	Philips screwdriver
Wire strippers	Electricians' knife (no snap off blades)	5/8" Auger bit
Tapping tools (6/32 & 8/32)	Magnetic torpedo level	Half round or round file
All safety equipment (Steel toed work boots, safety glasses or goggles, gloves)		

EQUIPMENT AND MATERIALS SUPPLIED BY THE COMMITTEE:

Materials for the competition	Conduit benders (Competitors may bring their own if they wish)
Cordless Drills (Competitors may bring their own if they wish)	Canadian Electrical Code – current edition (will be available for use)
Ladders	Hard hat
Robertson/Phillips drill bits	

*** No additional power tools or power tools accessories will be allowed during the competition.**

*** Any tool or equipment not contained in the scope will be inspected and approved/removed by committee member**

JUDGING CRITERIA

Competitors will be judged on:

- Observance of Occupational Health and Safety rules
- Observance of Canadian Electrical Code regulations
- Interpretations of diagrams, plans and estimates
- Installation techniques
- Planning and organization of work
- Choice and economical use of materials
- Installation techniques: location of devices and conduit
- Verification of function
- Identification of circuit breakers
- Connection of conductors
- Housekeeping



TIE BREAKING PROCESS

- Compare overall time used by competitors to complete the project

RELATED CAREER AND TECHNOLOGY STUDIES COURSES

Descriptions of all modules are located at the following website:

<https://education.alberta.ca/career-and-technology-studies/programs-of-study/>

CLOTHING REQUIREMENT

It is important that competitors present a professional image and appearance. Appropriate work clothing must be worn to compete. All clothing must be neat and clean and free of rips and tears. Casual wear such as shorts will not be permitted. No loose fitting clothes or jewelry.

SAFETY

The health, safety and welfare of all individuals involved with Skills Canada Alberta are of vital importance. Safety is a condition of participation with Skills Canada Alberta and shall not be sacrificed for the sake of expediency. At the discretion of the judges and technical committees, any competitor can be denied the right to participate should they not have the required proper safety equipment and/or act in an unsafe manner that can cause harm to themselves or others.

SAFETY REQUIREMENTS:

Competitors must provide their own safety equipment (all equipment must be CSA approved). Safety must be worn at all times on the competition site. No contestant will be allowed to take part in the competition if they do not have the required equipment or if they do not follow the safety rules and regulations. Required safety equipment consists of:

- Hard hat
- Steel toed work boots
- Safety glasses or goggles
- Gloves

ADDITIONAL INFORMATION

Lunch will be provided for all competitors, teacher chaperones, judges, and volunteers. Unfortunately, all allergies may not be able to be accommodated for. Your lunch ticket will be in the back of your name tag.

PARKING INFORMATION & VENUE MAPS:

Please park in Lot V – there is no charge. Overflow will also be allowed in Lot P. A printable parking map of Lethbridge College can be found at: <https://lethbridgecollege.ca/document-centre/forms/facilities-management/parking-map>

REGIONAL REGULATIONS & POLICIES

A copy of the Skills Canada Alberta Regional Regulations & Policies can be found at the following link: <http://www.skillsalberta.com/policies-and-procedures>

EVENT SCHEDULE

7:10	Competitors check in at Founders’ Square and wait to be escorted back to the competition area.
7:20	Students are escorted to the competition room





7:30	Orientation for students
8:00	Competition begins
12:15	Lunch break
12:45	Competition resumes
2:30	Competition ends – Judging begins Students may proceed to competitor lounge (Swing Space AN1804)
3:30	Feedback session for students in TT1951. Teachers and parents are welcome to attend.
4:00	Awards Ceremony (Swing Space) – open to the public

COMMITTEE MEMBERS

Holly Lehbauer	Career Transitions
Jordan Shapka	Lethbridge College
Judy Stolk-Ingram	Career Transitions
Tara Yagos	Career Transitions