



TECHNOLOGICAL **SKILLS** CHALLENGES

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DSBN REGIONAL **PLUMBING** SKILLS CHALLENGE 2024 SECONDARY LEVEL SCOPE

CHAIRS: Scott Wade & Brad Snively

Stamford Collegiate and St Catharines Collegiate

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PURPOSE OF THE CONTEST:

To test the competitor's theoretical knowledge, practical skills, and abilities pertaining to standards within the plumbing industry.

EVENT DETAILS:

Date: Thursday, March 7, 2024

Time: 8:00AM (Arrival & Setup) to 2:30PM (Clean-up & Judging)

Location: Stamford Collegiate, Niagara Falls

ENTRY: Students must register online at [DSBN Technological Skills Challenges 2024 Registration](#) with all the required information completed to be eligible to participate.

SKILLS AND KNOWLEDGE TO BE TESTED:

- Theoretical knowledge of plumbing and general practices.
- Blueprint reading and interpretation.
- Design and layout of materials

- Accurate construction/assembly of a project
- Safe operation of hand and power tools.

SAFETY REQUIREMENTS:

Competitors are required to follow all "Industry Safety Standards" during the competition.

- It is mandatory for all competitors to wear CSA approved **EYEWEAR**.
- It is mandatory for all competitors to wear CSA approved **FOOTWEAR**.
- Jewelry such as rings, bracelets, and necklaces or any item deemed unsafe by the competition judges must be removed.
- Proper shop attire must be worn (NO LOOSE CLOTHING)

EQUIPMENT, MATERIALS, TOOLS, AND SUPPLIES:

Equipment Supplied by the DSBN Tech Department and Mark's Plumbing Supply:

- All copper and Pex pipe, fittings and Push Connect fittings required to complete the project (delivered to Skills Challenge)
- All consumables (solder, flux paste, etc) to complete the project.

All Portable Power Tools Supplied By DSBN Tech Department

Hand Tools & Equipment Supplied by the Competitor/Home School:

- 1lb Propane soldering tank and torch
- 2" and 1" copper tubing cutter
- Hand Saw (optional)
- Imperial/Metric Measuring Tape
- Permanent sharpie marker/calculator
- Striker for Torch
- Paste/Flux with brush
- Sand/Grit Cloth
- ½ » fitting Brush
- Lead Free Solder
- Copper Reaming Tool
- Cleaning rags
- ½" Pex Crimping tool, fittings and rings
- Pex tubing cutter
- 2 of 6" Slip joint pliers
- Pex "Go no Go" gauge
- Pex Depth gauge
- *****BROOM, DUST PANS & GARBAGE CONTAINER*****

CLOTHING REQUIREMENTS:

- Competitors are to be dressed in a clean appropriate manner.
- Competitors are to wear DSBN technology shirts.
- Competitors are not permitted to wear clothing with any other logo than the DSBN.
- **Safety Glasses Required at "ALL TIMES".**
- CSA Approved safety footwear required.
- Any added PPE as per safety policies.

PROJECT AND COMPETITION EXPECTATIONS:

- To be disclosed on **Wednesday, February 14, 2024**

JUDGING CRITERIA:

- Judging will be conducted by specialists in Plumbing with the following rubric:

Criteria	Earned Points	Possible Points	Comments
Worksite Safety & Site Cleanup		10	
Preparedness		5	
Accuracy of Project, Fit, Finish & Appearance <ul style="list-style-type: none">● Points deducted per $\frac{1}{8}$"	/15 /15 /15 /15 /15 <hr/> /75	75	
Project Completion <ul style="list-style-type: none">● Copper Soldered and clean● Pex crimped and PASS with gauge● Push fit connectors as needed● Area is clean and organized● TOTAL	2.5 2.5 2.5 2.5 <hr/> /10	10	
TOTAL		100	

- The trade skill component of this challenge is worth approximately **90%** of the overall mark. The judges will also evaluate the competitor’s working knowledge of construction safety, level of independence, and clean-up. Competitors will receive the blueprints and the evaluation one (3) weeks prior to the day of the challenge. At the provincial level, students will be expected to be prepared with a resume and must complete a job interview component.

ENTRY:

- Students must be registered online prior to the **Competition Dates: March 6, 2024** with all of the required information completed to be eligible to participate.

TRANSPORTATION:

- Teachers and students are responsible for their own transportation to and from their respective schools the day of the Plumbing Challenge.

TEACHER’S ROLE:

- Instructors are expected to acquaint their student participants with all of the enclosed guidelines. Teachers may accompany their students or visit any time during the competition, ***“But may not assist their own competitors during the challenge.”***

*****Please Note: ** Judges will be instructed to deduct marks from participants that are deemed to be receiving instructions from teachers during the build.***

SPECIAL INSTRUCTIONS AND GUIDELINES:

- Respective students’ school will keep

COMPETITION AGENDA:

8:00 a.m.	Arrival at Contest Site & Set Up - (St. Catharines Collegiate, 34 St. Catharine st)
8:15 a.m.	Orientation & Opening Remarks
8:30- 8:45 a.m.	Competition begins
11:30 a.m.	***** Lunch (will be provided) *****
2:30 p.m.	Clean up - (Competitors/Schools are responsible for removal of Waste)
3:00 p.m.	Competition Ends - Final Judging and Closing Remarks

***** Each competitor will be given a number by their coordinator upon registration at the location and will be judged anonymously during the competition.***

LOCATION: 34 Catherine St, St. Catharines, ON L2R 5E7