

2022 POST-SECONDARY PROVINCIAL SKILLS CANADA COMPETITION



INSPIRE.
DEVELOP.
ELEVATE.



Contest Description

Edmonton Expo Centre, Edmonton
May 4 & May 5, 2022

EVENT: Architectural Technology and Design	LEVEL: Post-Secondary
WORLDSKILLS TRADE #: 52	LOCATION: HALL B, Edmonton Expo Centre, Edmonton
DURATION: 13.50 hours (two days, including breaks) 6.00 working hours on day 1 4.25 working hours on day 2	EQUIPMENT SET UP AND TESTING MAY 3: 6:00PM – 7:00PM PLEASE SEE THE “ADDITIONAL INFORMATION” SECTION AT THE END OF THIS DOCUMENT FOR MORE INFO.
COMPETITION SCHEDULE:	
Day 1 - May 4:	Day 2 - May 5:
ORIENTATION	7:45 AM – 8:00 AM
CONTEST REVIEW, Q&A	8:00 AM – 8:30 AM
COMPETITION BEGINS	8:30 AM
BREAK	10:15 AM - 10:30 AM
LUNCH	11:45 AM - 12:45 PM
BREAK	2:00 PM - 2:15 PM
COMPETITION ADJOURNS	4:00 PM
ORIENTATION	7:45 AM – 8:00 AM
COMPETITION RESUMES	8:00 AM
BREAK	10:15 AM - 10:30 AM
LUNCH	11:30 AM - 12:30 PM
COMPETITION ENDS	1:30 PM
CLOSING CEREMONY	6:30 PM – 8:00PM

Please Note: Due to the uncertainty caused by COVID 19, the PSCC could be subject to change at any time based on the public health context. This document is subject to change as competition information is updated. Competitors are responsible for staying up to date with the most recent information. Check the footer for last updated date. Changes will be highlighted in yellow.

Bring Your Own Device (BYOD) Additional Information

IMPORTANT: Competitors are required to bring their own device and software for the 2022 competition. Each competitor can choose their own device and software so their workflow and process are what they are familiar with.

Note, computers must remain inside the competition area for the duration of the competition from the time the competition begins on Day 1 to when the competition ends on Day 2 (including overnight). Competitors may supply their own locking cables if they wish.

Last Updated January 31, 2022



RICOH



2022 POST-SECONDARY PROVINCIAL SKILLS CANADA COMPETITION



INSPIRE.
DEVELOP.
ELEVATE.



CONTEST INTRODUCTION

Purpose of the Challenge

This challenge assesses technical knowledge of commercial building, industry standard construction practices, and the skills necessary to produce and print construction drawings using computer-aided design software. The competition will also gauge competitors' abilities to solve technical and functional problems to produce a building design. Competitors should be able to produce a relatively complete design and working drawing sets for a light commercial building.

PROJECT DESCRIPTION

Day 1. Competitors will be challenged with interpreting given information to develop a constructible architectural design solution for a light commercial building and surrounding site.

Day 2. Competitors will complete and print their drawings.

SKILLS AND KNOWLEDGE TO BE TESTED

Architecture – envelope design, space planning, materials selection, an awareness of environmental sustainability concepts and the application of barrier free design standards.

Engineering – structural determination (e.g. identify columns, beams and load bearing elements); building mechanical and electrical systems integration

Construction – regulatory standards, assembly, maintainability, environmental considerations and sustainability

Core Competencies

Competitors will be required to demonstrate knowledge and skills in the following areas:

- CADD application including (but not limited to) practical knowledge of building modeling, drawing setup, printing, dimensioning, and annotation.

- Architectural detailing skills in 2D and 3D.

- Planning design concepts, architectural space layout and relationships.

- Fundamentals of building structural systems and incorporate it with the building envelopes.

- Basic building M&E systems and their integration in the building.

- Presentation skills, including sheet layout, use of standard scale, illustration and graphical communication.

2022 POST-SECONDARY PROVINCIAL SKILLS CANADA COMPETITION



INSPIRE.
DEVELOP.
ELEVATE.



Equipment and Materials:

Competitors are required to bring their own device that is installed with licensed CADD application software necessary for the competition without requiring internet access. Each competitor can choose their own device and software so their workflow and process is what they are familiar with.

If competitors are bringing a computer or laptop from their school (instead of their personal computer), please ensure that the computer is unlocked (including available administrator access) so documents and possibly software can be saved/installed to the hard drive and technology support can be provided onsite. This may require access to CMOS settings.

Additionally, competitors are required to bring their own supplies required for the competition. These supplies are outlined below. Software manuals, textbooks, external hardware, or electronic data (e.g. CD or photocopied material) will NOT be permitted. During the competition, competitors may not access the internet or reference material (digital or hardcopy).

Equipment and Materials Competitors Must Supply:

Computer / Monitor(s) / Mouse / Keyboard	Empty USB memory stick – Min. 4 GB	Paper (for notes and sketching)	Calculator / Convertor
Scales (metric and imperial)	Pencils/pens	Extension Cord (as needed)	Computer locking device (optional)
Power Bar (as needed)			

Note

- Digital music players & cell phones (for listening to music only) are permitted with headphones during the competition provided the volume is not disruptive to other competitors. Cell phones must be set to airplane mode, and placed face-down on the table in clear sight of competition invigilators.
- Internet is not available.
- Internet access is not permitted during the competition.

JUDGING CRITERIA

Presentation

Showcasing creative design with respect Canadian construction standards, demonstrate architectural solutions and problem solving, and effective operation of CADD applications.

Accuracy of Drawing

Technical design and presentation including (but not limited to); architectural drafting standards, dimensioning, line type, line weight, annotation, hatch/fill patterns, standard symbols, etc.

Last Updated January 31, 2022



RICOH



2022 POST-SECONDARY PROVINCIAL SKILLS CANADA COMPETITION



INSPIRE.
DEVELOP.
ELEVATE.



Work Organization

- Graphic layout and presentation of architectural drawings, designs, and technical solutions.
- Demonstrate ability to follow conceptual design intent and specifications through to solutions of design and technical problems.
- Referencing of drawings and technical resources.
- Compliance with standards such as building codes and municipal guidance.
- Integration of Structural, Electrical and Mechanical systems.

Solutions and Assessment

Competitors will demonstrate technical competence in:

- resolving building construction and design problems;
- the application of architectural design and drafting standards; and
- the operation of industry standard CADD application(s).

Solutions shall be original, innovative, sustainable, energy efficient, complete, simple, functional, and durable for Alberta's climate.

Weighting of Drawings and Solutions

POINT BREAKDOWN Day 1	
Cover Sheet	5%
Plans	23%
Elevation(s)	10%
Building Sections	8%
Wall Section(s)	8%
Interior Plan Layout(s)	6%
Total	60%

POINT BREAKDOWN Day 2	
Plan & Section Details	30%
Interior Elevations	4%
Interior Plan Layout(s)	6%
Total	40%

Tie Breaking Process

1. Ties will be broken by the judges' re-evaluation of the relevant documents for the tied competitors.

Electronic file(s) may also be evaluated for the level of mastery of the software.

2022 POST-SECONDARY PROVINCIAL SKILLS CANADA COMPETITION



INSPIRE.
DEVELOP.
ELEVATE.



CLOTHING REQUIREMENT

It is important that competitors present a professional image and appearance. Appropriate work clothing must be worn to compete. Shoes must be Close Toed. 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.

ADDITIONAL INFORMATION

Equipment Set-up and Testing (for BYOD competitions)

Competitors who are competing in technology-based competitions that are BYOD, will be given an opportunity to set up and test their equipment to ensure their equipment is fully functional and networked (where required) prior to the start of the competition the following day. Only registered competitors will be permitted into the competition area for set-up and testing. Competitors who miss the equipment and setup testing opportunity will need to set up their equipment after the mandatory competitor orientation time on the day of competition. Any time that is required to set up and test their equipment on the competition day will be part of their overall competition time. The competition time for these competitors will NOT be extended.

Equipment Set-Up and Testing for all event areas that are a BYOD competition will be held on Tuesday May 3, 2022 from 6:00pm-7:00pm.

Skills Canada Alberta Regional and Provincial Rules and Regulations

[Regional and Provincial Rules and Regulations](#)

Competitors must be prepared to adhere to all public health measures in place at the time of the PSCC.

Lunch

Lunch for competitors will be provided by Skills Canada Alberta.

Parking & Venue Maps

<http://edmontonexpocentre.com/attend/parking/>

Last Updated January 31, 2022



RICOH





Competitor Registration

Competitor Registration for the PSCC will take place on Tuesday May 3, 2022 from 9:00am-6:00pm outside Hall B of the Edmonton EXPO Centre. Please note you will be required to present your COVID-19 proof of vaccination.

Virtual Awards Ceremony

The Virtual Awards Ceremony will take place **Friday, May 6th at 6:30pm**. A link will be made available on the website with additional information prior to the ceremonies.

Team Alberta Information

Team Alberta (Post-Secondary) will be selected at the PSCC happening on May 4 - May 5, 2022. Top eligible medalists will compete at the Skills Canada National Competition (SCNC) May 24-28, 2022 in Vancouver, BC. It is recommended that competitors review the SCNC contest description to be familiar with the national contest description and project at <http://www.skillsCanada.com/>.

If a competitor is not able to attend the SCNC, competitors **MUST** notify Katherine Kupchenko katherinek@skillsalberta.com prior to the start of competition. If a gold medalist is not able to attend the SCNC, the next top-ranking individual will be asked to participate.

Test Project change at the Competition

Where the Test Project has been circulated to Competitors in advance, PTC can change a maximum of 30% of the work content.

Questions?

Please contact Whitney Koop MikeS@skillsalberta.com if you have any questions regarding the Contest Description.

COMMITTEE MEMBERS

Peter Kelly - MHC
Jacob Waldbillig