

# 2022 POST-SECONDARY PROVINCIAL SKILLS CANADA COMPETITION



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## Contest Description

Edmonton Expo Centre, Edmonton

May 4 & May 5, 2022

*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.*

<b>EVENT:</b> Precision Machining	<b>LEVEL:</b> Post-Secondary														
<b>WORLDSKILLS TRADE #:</b> 03	<b>LOCATION:</b> Hall C, Edmonton EXPO Centre, Edmonton														
<b>DURATION:</b> 12 Hours (over 2 days)															
<b>COMPETITION SCHEDULE:</b>															
<b>May 4:</b>	<b>May 5:</b>														
<table border="1"> <tr> <td><i>ORIENTATION</i></td> <td>8:00AM-9:00AM</td> </tr> <tr> <td>COMPETITION</td> <td>9:00AM-12:00 NOON</td> </tr> <tr> <td>LUNCH</td> <td>12:00 NOON-1:00PM</td> </tr> <tr> <td>COMPETITION</td> <td>1:00PM-4:00PM</td> </tr> </table>	<i>ORIENTATION</i>	8:00AM-9:00AM	COMPETITION	9:00AM-12:00 NOON	LUNCH	12:00 NOON-1:00PM	COMPETITION	1:00PM-4:00PM	<table border="1"> <tr> <td><i>COMPETITION</i></td> <td>8:00AM-11:00AM</td> </tr> <tr> <td>LUNCH</td> <td>11:00AM-12:00 NOON</td> </tr> <tr> <td>COMPETITION</td> <td>12:00 NOON-3:00PM</td> </tr> </table>	<i>COMPETITION</i>	8:00AM-11:00AM	LUNCH	11:00AM-12:00 NOON	COMPETITION	12:00 NOON-3:00PM
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## CONTEST INTRODUCTION

A machinist uses machine tools to manufacture parts from raw material for a variety of industries. Nearly all consumer goods have been machined or are manufactured from tools or equipment which has been manufactured by a machinist.

## Purpose of the Challenge:

Assess the competitor's precision machining skills and trade knowledge through practical testing.

## SKILLS AND KNOWLEDGE TO BE TESTED:

The contest will occur over two days (12 hours of competition). On the first day of competition there will be a 1 hour professional consultation followed by 3 hours of machining. The second day there will be 3 hours of machining. The machining section of the contest involves machining projects using a conventional engine lathe and a conventional vertical milling machine.

Last Updated March 15, 2022



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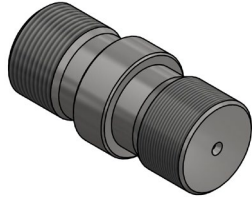
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## PROJECT DESCRIPTION

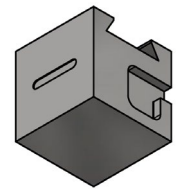
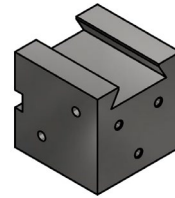
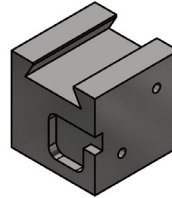
### Conventional Engine Lathe

- Safe operating procedures
- Applied Metrology
- Cylindrical & Taper Turning / Grooving / Cylindrical Threading operations
- Three and Four-jaw chuck work



### Conventional Vertical Milling Machine

- Safe operating procedures
- Applied Metrology
- Face / Pocket / Form milling
- Drilling / Counter Boring / Reaming operations



## EQUIPMENT & MATERIALS

### Equipment and Materials Competitors Must Supply:

- CSA approved safety glasses
- CSA approved steel toed footwear
- Shop coat (coveralls)
- Ear Plugs
- Competitors are required to follow all industry safety standards during the competition

**\*Competitors will not be allowed into the competition area without the required safety equipment.**

### Equipment and Materials Supplied by the Committee:

- The following will be supplied to each competitor:
  - All appropriate measuring tools for the Lathe and Milling Machine projects
  - All appropriate lathe and milling machine cutting tools and holders.
  - Hand tools
  - Project Materials may include
    - Mild Steel
    - Alloy Steel
    - Aluminum

Last Updated March 15, 2022





**JUDGING CRITERIA**

	Mill	Lathe
Project Completion	2.5%	2.5%
Compliance with Occupational Health and Safety regulations	2.5%	2.5%
Compliance with dimensions, tolerances, and fits as specified in plans	40%	40%
Compliance with appropriate surface finish and deburring	5%	5%
	<b>50%</b>	<b>50%</b>
	<b>Total 100%</b>	

**Note:**

If a second work piece blank is required, the contestant will lose 20% from the *“Compliance with dimensions, tolerances and fits as specified in plans”* section.

**TIE BREAKING PROCESS**

The time required by the contestants to complete their projects will determine the tie breaker.

**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**

**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/>

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## 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 6<sup>th</sup> 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 Victoria Anderson [Victoriaa@skillsalberta.com](mailto:Victoriaa@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 Mike Sury [Mikes@skillsalberta.com](mailto:Mikes@skillsalberta.com) if you have any questions regarding the Contest Description.

## COMMITTEE MEMBERS

Darren Roth (Committee Chair)  
Graham Greenhall  
Phillip Townsend

Calmar Secondary School  
SAIT  
NAIT

Last Updated March 15, 2022

