

# 2021 PROVINCIAL SKILLS CANADA COMPETITION



## CONTEST DESCRIPTION

<b>CONTEST AREA: PRECISION MACHINING</b>			<b>LEVEL:</b> Post-Secondary
<b>COMPETITION DATE AND TIMES:</b>			<b>LOCATION:</b> Competitors will compete individually from their local Post-Secondary Institution
Orientation	April 28	8:30-9:00am	
Competition Day 1	April 28	9:00-noon 12:30-3:30	
Competition Day 2	April 29	9:00-noon 12:30-3:30	
Lunch	April 28/29	12:00-12:30	
<b>DURATION:</b> 12 HOURS			WorldSkills Trade #: 3
<p><b>COMPETITION FORMAT: (VIRTUAL, AT A POST-SECONDARY INSTITUTION)</b> Competitors will compete individually, in person, from their local Post-Secondary Institution. Location specific COVID-19 protocols must be followed. Post-Secondary Institutions and competitors will need to work together to ensure the competitor is ready for success on their competition day. They will need to prepare their competition space with all of the required tools, equipment, materials, and technology (as listed below) that will be needed to complete the competition. This competition will be closed to the public. Only registered competitors and assigned Provincial Technical Committee members will be allowed to attend.</p> <p><b>COMPETITION ORIENTATION:</b> The competition will begin with a virtual orientation. Competitors will join the assigned videoconference link that will be emailed to all registered competitors for the competition orientation. Camera's MUST be on and competitors visible on the camera during the orientation.</p> <p><b>LIVESTREAMED COMPETITION: (If applicable) Competitors must film their competition throughout the entire day.</b> Camera's MUST be on and competitors visible on the camera, as well as mics working. Competitors must consider their camera angle and lighting in advance of the competition. It is the competitors responsibility to ensure they are prepared for a day long livestream.</p>			
<p><b>SAFETY:</b> 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.</p> <p><b>Safety Checklist:</b> It is the responsibility of each competitor and teacher to review the Safety Checklist (<a href="https://skillsalberta.com/additional-2021-competition-resources/">https://skillsalberta.com/additional-2021-competition-resources/</a>) in advance of the competition</p>			



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and ensure they are able to meet all safety requirements. During the orientation, the safety checklist will be formally reviewed.

**AWARDS CEREMONY INFORMATION:** Please join us for a live virtual awards ceremony on May 13<sup>th</sup> at 6:30PM.

**Please note: 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**

## 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.

## PROJECT DESCRIPTION

<p><b>Conventional Engine Lathe</b></p> <ul style="list-style-type: none"> <li>• Safe operating procedures</li> <li>• Applied Metrology</li> <li>• Cylindrical &amp; Taper Turning / Grooving / Cylindrical Threading operations</li> <li>• Three and Four-jaw chuck work</li> </ul>	<p><b>Conventional Vertical Milling Machine</b></p> <ul style="list-style-type: none"> <li>• Safe operating procedures</li> <li>• Applied Metrology</li> <li>• Face / Pocket / Form milling</li> <li>• Drilling / Counter Boring / Reaming operations</li> </ul>

## EQUIPMENT & MATERIALS

### Institute Provided Tools, Materials, and Equipment

All appropriate measurement tools	Project material	Hand tools
All appropriate cutting tools		



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## Competitor Provided Tools, Materials, and Equipment

CSA Approved Safety Glasses	Ear Plugs	Shop coat (coveralls)
CSA Approved steel toed footwear	Competitors are required to follow all industry safety standards during the competition.	

## 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.

## CLOTHING REQUIREMENT

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 and open toed shoes/sandals will not be permitted. No loose-fitting clothes or jewelry.

## ADDITIONAL INFORMATION

Skills Canada Alberta Regional and Provincial Rules and Regulations  
[Regional and Provincial Rules and Regulations](#)

Post-Secondary Competitor Information is [available here](#).



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## Lunch

Lunch will be provided by Skills Canada Alberta.

## Team Alberta Information

Team Alberta will be selected from competition Gold medalists who will then be eligible to participate at the Skills Canada National Competition (SCNC) in a virtual format May 25-30, 2021. 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/>.

## Ethical Conduct

We recognize that participants will be competing individually in their own unique environments. We expect all competitors to compete fairly, respecting and abiding by the established rules in the true spirit of Skills Canada Alberta.

## Letter of Participation

Competitors who participate in the 2021 Provincial Skills Canada Competition are eligible for a Letter of Participation by request by contacting [katherinek@skillsalberta.com](mailto:katherinek@skillsalberta.com).

## COMMITTEE MEMBERS

Darren Roth (Committee Chair)	Calmar Secondary School	
Gary Lindquist	SAIT	
Phillip Townsend	NAIT	
Reece Burdeniuk	Argus Machining Co.Ltd.	

