

# 2022 SECONDARY SKILLS CANADA ALBERTA VIRTUAL COMPETITION

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DEVELOP.  
ELEVATE.



## CONTEST DESCRIPTION

<p><b>CONTEST AREA: WELDING</b></p>	<p><b>LEVEL: Secondary</b></p>								
<p><b>COMPETITION SCHEDULE:</b> Competition Date: Monday April 11<sup>th</sup>, 2022 Duration: 6 Hours</p> <table border="1" data-bbox="201 558 620 919"> <tr> <td>Live Stream Check-In- <b>Mandatory</b></td> <td>8:00 a.m.</td> </tr> <tr> <td>Live Stream Orientation- <b>Mandatory</b></td> <td>8:30 a.m.</td> </tr> <tr> <td>Competition Start</td> <td>9:00 a.m.</td> </tr> <tr> <td>Competition End</td> <td>3:30 p.m.</td> </tr> </table> <p><b>PLEASE SEE THE FULL COMPETITION SCHEDULE BELOW.</b></p>	Live Stream Check-In- <b>Mandatory</b>	8:00 a.m.	Live Stream Orientation- <b>Mandatory</b>	8:30 a.m.	Competition Start	9:00 a.m.	Competition End	3:30 p.m.	<p><b>LOCATION: COMPETITOR'S SCHOOL. SEE COMPETITION FORMAT INFORMATION BELOW</b></p> <p><b>LIVESTREAMED:</b> <b>YES – COMPETITORS WILL BE REQUIRED TO BE ON CAMERA THROUGH THE COMPETITION WITH THEIR CAMERA POSITIONED ON THEIR WELDING BOOTH. THE COMPETITOR MUST REMAIN IN THEIR CAMERA FRAME AS MUCH AS POSSIBLE WITH THE EXCEPTION OF A BREAK OR LUNCH.</b></p>
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Live Stream Orientation- <b>Mandatory</b>	8:30 a.m.								
Competition Start	9:00 a.m.								
Competition End	3:30 p.m.								
<p><b>COMPETITION FORMAT: (VIRTUAL/ IN SCHOOL)</b> All secondary competitors will be competing within their school environment and must arrange in advance with a teacher for a safe competition location, according to their school's Covid-19 safety policies. They will need to prepare their competition space with all of the required tools, equipment, materials, and technology that will be needed to complete the competition. Teachers and competitors will need to work together to ensure the competitor is ready for success on their competition day. <b>Project materials will be supplied and shipped to your school prior to your competition.</b></p> <p>Competitors will join the assigned videoconference link that will be emailed to all registered competitors. <b>Competitors will need to position their camera in such a way that the judges can see their entire work area from an exterior view (exterior view of the welding booth).</b> Competitors will be expected to have their camera on for the duration of the competition.</p> <p>Once a competitor has completed their assigned project by the specified competition completion time (no additional time will be permitted), competitors must submit five photographs of their project <b>WITHIN 15 MINUTES (by 3:45 p.m.)</b> of the contest concluding. For the photos, please submit:</p> <p><b>AS COMPLETED – PRIOR TO WELDING</b></p> <ol style="list-style-type: none"> <li>Tacked project before welding starts</li> </ol> <p><b>UPON COMPLETION</b></p> <ol style="list-style-type: none"> <li>One overhead top shot</li> <li>One right side shot</li> <li>One left side shot</li> <li>One angle shot</li> </ol>									

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# 2022 SECONDARY SKILLS CANADA ALBERTA VIRTUAL COMPETITION

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**\*All photos MUST include a copy of a student or photo ID next to the project.**

**PHOTO PROJECT SUBMISSION** - Submissions can be uploaded to the following link:

<https://form.jotform.com/SkillsAB/2022SCAVC>

Multiple files can be uploaded at once, each file has a maximum size of 1G. If file sizes are larger than 1G, please follow alternate instructions through the submission link.

**ACCEPTED FILE TYPE** - Zip file. To create a zip file – Select all the files that you would like to submit and right-click your mouse, a menu will open, select Send To, and then click on Compressed (zipped) folder. A zip file will then be created containing your submission documents.

**FINAL PROJECT SUBMISSION** – Completed projects are to be shipped to the specified location that was included in the package you received your materials in. Please take note of the paid return shipping label that will be in the package. This must arrive to the specified location **NO LATER THAN end of day on April 18<sup>th</sup>, 2022.**

## COMPETITION SCHEDULE:

Live Stream check- in – <b>Mandatory – On camera</b>	8:00 a.m.
Live Stream Orientation – <b>Mandatory – On Camera</b>	8:30 a.m.
Competition Start – <b>Mandatory-On Camera</b>	9:00 a.m.
#1 Picture - tacked project submitted before welding starts	As per Competitor`s Timeline
Competition End – Take Remaining Pictures #2-5	3:30 p.m.
#1-5 Picture Group – Project Pictures Due to above upload link	3:45 p.m.
*Lunch to be taken as needed. (30 min)	

**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 Checklist:** It is the responsibility of each competitor and teacher to review the Safety Checklist in advance of the competition to ensure all safety requirements are met prior to the competition. During the official competition orientation, the Safety Checklist will be formally reviewed with competitors. The Safety Checklist is posted as a sperate document with the Contest Description.

**Submission Link:** <https://form.jotform.com/SkillsAB/2022SCAVC>

**Please note:** Competitors **MUST** be present for the mandatory orientation, or their projects will not be accepted.

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**AWARDS CEREMONY INFORMATION:** Please join us for a live virtual awards ceremony on May 6<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**

To enable competitors to demonstrate their knowledge & skill of welding principles. The competition will consist of a practical examination. Competitors will be expected to utilize their practical skills & knowledge in drawing interpretation of fitting, and welding.

**SKILLS AND KNOWLEDGE TO BE TESTED**

The provincial skills competitors should be prepared to apply their theory knowledge in a layout and drawing interpretation to complete a 6-hour practical project which may include but not limited to the following tasks (please see the attached project drawing and weld procedures):

Practical Tasks

- Shielded metal arc welding (SMAW, mild steel)
- Gas metal arc welding (GMAW, mild steel)

The following types of joints and positions **may** be included.

SMAW, GMAW
Plate: 1G, 2G, 3G, Fillet Weld: 1F, 2F, 3F,4F, 5F Pipe may or may not be included

**PROJECT DESCRIPTION**

Please see the attached dimensional print and weld processes. Please note that the competition plans may be changed up to 30% on the day of the competition.

Once the project is tacked, No grinding is allowed!

Pictures of the tacked project must be submitted as per the details listed above.

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The project shall, at all times be welded 100% on the workbench. (The project must remain flat on the baseplate)

Manual wire brushing may be used on all weld surfaces. (No grinding or filing)

All measurements are in millimeters.

**EQUIPMENT & MATERIALS**

Equipment and Materials Supplied by Skills Canada Alberta:

Each competitor will receive one (1) project kit that contains the required materials to build project.

**Competitor/School Provided Tools, Materials, and Equipment\***

Work Boots (CSA Approved steel toe work boots)		Welding Helmet
Side shields required for prescription glasses		Safety Glasses
Appropriate clothing (100% cotton coveralls recommended)		Welding Gloves
Long Sleeve Denim Shirt or Jacket - 100% cotton		Ear Plugs
E7018 (E4918) 1/8 as many as needed.	1 Roll of .035 GMAW Wire	1 Box of E6010 (E4310) 1/8 as many as needed.
E7018 (E4918) 3/32 as many as needed.		

Competitors tools will be limited to the following:

Pipe liner files	Wire Brush	Vice Grips/Pliers
Magnets	Tri Square	Imperial/Metric Tape Measure
Centre Punch	Hammer	Cold Chisel
Soap Stone		

\*Competitors are required to follow all industry standards during the competition.





\*Competitors and schools will need to work together to arrange for the tools, equipment, and materials provided by the competitor. If a competitor and/or school is not able to procure a certain item, please contact [mikes@skillsalberta.com](mailto:mikes@skillsalberta.com) to inquire if additional arrangements can be made.

**JUDGING CRITERIA**

GMAW fillet size-Are the GMAW fillet sizes according to prints?
GMAW porosity-Are the GMAW welds free of surface porosity?
SMAW fillet size-Are the SMAW fillet sizes according to prints?
Are the SMAW welds free of surface porosity?
GMAW penetration-Is the SMAW groove weld completely penetrated?
SMAW penetration-Is the SMAW groove weld completely penetrated?
GMAW reinforcement-Does the GMAW groove weld have excessive reinforcement?
SMAW reinforcement-Does the SMAW groove weld have excessive reinforcement?
GMAW undercut & overlap-Are the GMAW beads free of undercut & overlap?
SMAW undercut & overlap-Are the SMAW beads free of undercut & overlap?
GMAW Fillet joints are completely fused to the parent material?
SMAW Fillet joints are completely fused to the parent material?
Joints are free from Misalignment?
Arc strikes-Is the project free of arc strikes?
Welding position-Are welds produced in the correct position?
Fitup-Are parts fitted as per drawing?
Weld cleaning-Is all weld spatter and slag removed?

**TIE BREAKING PROCESS**

The competitor that has the highest mark on ALL groove welds will be considered the winner. 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.

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**Related Career and Technology Studies COURSES**

Descriptions of all modules are located at the following website:

[https://education.alberta.ca/media/160533/fab\\_course\\_summaries\\_old.pdf](https://education.alberta.ca/media/160533/fab_course_summaries_old.pdf)

FAB 1040	FAB 2020	FAB 3048	101B	102A	103A
FAB 1048	FAB 2030	FAB 3050	101C	102B	103B
FAB 1050	FAB 2040	FAB 3060	101G	102C	103C
FAB 2048	FAB 3170		101	102D	103D
FAB 2050	FAB 2060		101F	103F,G&H	
FAB 2070					

**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](#)

**Competitor Registration**

Registration for Secondary Skills Canada Alberta Virtual Competition will open online at <https://portal.skillsalberta.com/> on January 26, 2022 at 8:30 AM. There will be no registration fee for competitors to compete. Late cancellation or drop-spots fees may apply.

**Lunch**

Lunch will NOT be provided.

**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.

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**Team Alberta Information**

Top eligible medalists will compete virtually in the Skills Canada National Competition (SCNC) May 16-27, 2022. 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](mailto: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.

**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 2022 Provincial Skills Canada Competition are eligible for a Letter of Participation that can be downloaded on the Registration Portal after the competition ends.

**Questions?**

Please contact Whitney Koop [whitneyk@skillsalberta.com](mailto:whitneyk@skillsalberta.com) if you have any questions regarding the Contest Description.

**COMMITTEE MEMBERS**

Ken Heather	Brad Hollman	Kevin Vadori
Dan Lynge	Brent Melnyk	Ken Mcken
Dave Heins	Doug Sontag	Lyle Kragnes
Julia Penner	Jethro Ulrich	

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