



CONTEST DESCRIPTION

CONTEST AREA: AUTOMOBILE TECHNOLOGY			LEVEL: Secondary
COMPETITION SCHEDULE: Competition Date: Wednesday April 13 th , 2022 Duration: 6 Hours		pril 13 th , 2022	LOCATION: COMPETITOR'S SCHOOL. SEE COMPETITION FORMAT INFORMATION BELOW
Registration	April 13 st	8:00am-	
		8:30am	
Orientation	April 13 st	8:30am-	
		9:00am	
Competition	April 13 st	9:00am-	
		3:30pm	

COMPETITION FORMAT: (VIRTUAL/ IN SCHOOL)

All secondary competitors will be competing with in 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 (as listed below) 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.

Each competitor must have a teacher/supervisor available throughout the day, in case of incident. (Teacher/Supervisor must be present at the competition orientation.)

Competitors and Teachers should be prepared to receive additional information about the competition projects, livestreams, shipping, etc. prior to the competition. Please ensure you are double checking for emails from Skills, including checking junk mail.

WEBEX LIVESTREAMS:

Competition Registration and Orientation: The competition will begin with a mandatory virtual registration. Competitors will join the assigned link that will be emailed to all registered competitors and registering teachers in advance. This will be the time that competitors are able to check in and ensure sound, cameras, and tech are working appropriately. The registration will be followed by competition orientation. Camera's MUST be on and competitors visible on the camera during the orientation.

Competition Livestream: Competitors must remain on camera through their entire competition. 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 competitor's responsibility to ensure they are prepared for the competition livestream.













TEACHER JUDGING FORM SUBMISSION DEADLINE: April 13th by 4:00PM SUBMISSION 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: pdf, doc, docx, xls, xlsx, csv, txt, rtf, html, zip, mp3, wma, mpg, flv, avi, jpg, jpeg, png, gif. If you would like to submit a different type of file, please place it in a zip folder.

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.

Submissions will be due within 30 minutes of the end of competition time. Please note: Late submissions sent after the date and time specified above will not be accepted.

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

AWARDS CEREMONY INFORMATION: Please join us for a live virtual awards ceremony on May 6th 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 identify and evaluate a competitor's knowledge of Automobile Technology. The competitor will display their understanding of specific areas of the automobile and demonstrate their skills for maintaining and repairing components related to those areas.













SKILLS AND KNOWLEDGE TO BE TESTED

There will be a combination of practical skill assessments and analysis of information and case studies.

PROJECT DESCRIPTION

Station Set-Up Instructions will be released prior to the competition so teachers will be able to prepare each station prior to the competition.

Brakes and Stability Control Systems

- Competitors may be required to:
- Dis-assemble and assemble disc and drum brake assemblies.
- Measure minimum rotor thickness, maximum rotor thickness variation, and rotor run-out.
- Measure brake drum diameter and brake drum out of round.

Suspension and Steering Systems

- Competitors may be required to:
- Identify the type of suspension and steering systems used in a vehicle.
- Dismount and mount a tire on a rim.
- Perform a tire repair.
- Balance a tire and rim assembly and check the assembly for road force variation.
- Interpret wheel alignment readings and recommend corrective adjustments.

Driveline

- Competitors may be required to:
- Identify paths of power in a manual transmission.
- Identify components in a manual transmission.
- Interpret driveline angles.

Body Electrical

Competitors may be required to:

- Interpret a wiring diagram.
- Diagnose faults in an electrical circuit.

Engine Mechanical

- Competitors may be required to:
- Measure engine components for flatness, out of round, taper, diameter, endplay, clearance, and lift
- The competitor may be required to use dial indicators, straight edges, feeler gauges, micrometers, cylinder bore gauge, telescopic gauges, plastigauge or calipers.

Engine Performance

• Diagnose operational characteristics of the engine. Follow the manufacturer's diagnostic procedures to identify the cause of the DTC and the repair required to remedy the condition.











2022 SECONDARY SKILLS CANADA ALBERTA VIRTUAL COMPETITION

EQUIPMENT & MATERIALS

School Provided Tools, Materials, and Equipment*

Brakes and	Suspension and	Driveline	Body	Engine	Engine
Stability	Steering		Electrical	Mechanical	Performance
Vehicle w/disc	Wheel & Tire	This	This	Engine	This exercise
brake or training	Assembly	exercise	exercise will	Components	will be the
unit with	Tire Repair Tools and	will be the	be the	(Piston	analysis of
components	supplies.	analysis of	analysis of	Assembly, Cam	provided
mounted in the		provided	provided	Shaft, Crank	written or
correct		written or	written or	Shaft)	visual
orientation		visual	visual		material
		material	material		
Brake	Wheel Balancing			Measuring Tools	
Measuring	Equipment			Vernier	
Tools. Dial	Tire			Micrometer Set.	
Indicator,	Removal/Installation			Bench Vise with	
Vernier	Equipment			Soft Jaws.	
Micrometer,					
Drum Brake					
Micrometer					

^{*}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 to inquire if additional arrangements can be made.

JUDGING CRITERIA

Each competitor will be judged for their ability to comprehend written instructions, interpret, and perform tasks related to each practical or written test. Each competitor must demonstrate common safety practices. All tasks are equally weighted, and the total is comprised of an average of all tasks combined.

Teachers will act as a Judge for the competition for their competitor(s). Judging sheets and judging information will be released to the registering teachers prior to the competition. Teachers will judge each station on the judging sheets released.

TIE BREAKING PROCESS

Highest mark in Engine Mechanical and Body Electrical combined will break the tie.

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 6th at 6:30PM. A link will be made available on the website with additional information.

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 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 if you have any questions regarding the Contest Description.

COMMITTEE MEMBERS

Lee Swalm SAIT	Russ Belik NAIT	Martin Larsen GPRC	Patrick Jackson SAIT
Harley Breadner SAIT	Brad Gabrielson RDC	Andrey Imanoff SAIT	Jerry Kokot SAIT
Ryan Hauswirth SAIT	Lena Spicer SAIT	Barry Wong SAIT	Rick Martineau Consulab
Wade Maillet SAIT	Wayne Martineau SAIT	Patrick Brown-Harrison SAIT	









