



SKILLS BC (REGIONAL) COMPETITION

Jr Robotics Coding Challenge
Grades 4-9

TECHNICAL CHAIR

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SKILLS BC (REGIONAL) COMPETITION:

February 1 st	Registration opens
February 6 th	Practice tutorials – Open Two weeks before the regional challenge date
February 20 th	Regional Challenge opens at Noon
February 20 th	Challenge closes at 8:00pm
February 22 nd	Winners and qualifying finalists are announced.

CONTEST STATUS

This challenge is offered as an official challenge. Skills BC will pay all RobotMesh registration costs for 2021. There will be a regional limit on competitors.

PURPOSE OF THE CONTEST:

To provide competitors with the opportunity to demonstrate their science, technology, engineering, and mathematics (STEM) skills through practical and theoretical application and to enhance these skills through hands-on, student-centered learning.

The Challenge

Students will compete in a coding challenge (online) using the online software platform Robot Mesh Studio. The coding language used will be Blockly ('Scratch' as previously known). There will be 4 to 6 challenges to be completed by each competitor. Each challenge will be timed and scored. Students will follow specific instructions directed by the online virtual system to create a set of codes to operate a virtual robot to perform various tasks.

Please have a look at the timeline listed above.

Two weeks before the challenge date, a message will be sent to all competitors with their access ID, password code and a website link. Competitors will have access to a number of online tutorials to practice and get to know the online system as well as the user interface before the competition. As the online tutorials are educational in nature, following the virtual system's sequential layout by the will enable the students to learn Blockly and the user functions of the online virtual robot.

During the competition day, access to the virtual system will be granted to all competitor. Each competitor will have 8 hours to complete the required challenges.

SKILLS AND KNOWLEDGE TO BE TESTED:

- Critical Thinking
- Project Management
- Communication Skills
- Problem Solving

Please watch the following YouTube videos before registering for the event:

1. Introduction to Robotmesh Studio - https://youtu.be/i-NS0uy_Oj8
2. The User Interface - https://youtu.be/tq_x3c_UEE
3. Robot Mesh Virtual Academy: <https://youtu.be/jMUdVac2Llw>

EQUIPMENT AND MATERIALS:

Supplied by student competitor: ***A desktop computer or a laptop with access to the internet. It is best to use wired internet for stability purposes (WIFI is also possible but it may lag or cause connection issue(s) to the secured server). The computer or laptop should be able to run the up-to-date version of internet browsers (Edge, Chrome, etc.) A backup computer may be a good idea during the competition day. It is best to test the computer(s) and internet access and browser with the online tutorials before the competition date.***

JUDGING CRITERIA:

Scoring

- Each challenge will be individually scored by the virtual system.
- 'Total Tally' will be done by the Technical Chair at the conclusion of the competition day. Overall winners and provincial qualifications will be announced at the Skills BC website and by email from the Technical Chair to the winners.

AWARDS

The competitor with the top finalist standings in all technical challenges will be the overall regional winner, followed by the second-place competitor as well as the third-place competitor. Competitors within the top 10% overall (of their region) will qualify and represent their region for the provincial competition in April 2021. It is possible that a Tie may exist, in this case, both or more than one winner will share in the positional standings.

RULES, REGULATIONS AND ELIGIBILITY

Please be sure to review all eligibility criteria in the complete Competitor Information Package, available online at <http://skillscanada.bc.ca/>.

Eligibility Criteria: Students from Grade 4 to 9 may compete in this challenge.

Elementary/Secondary Students are allowed to:

- **Compete in only one challenge at the Skills BC (Regional) Competition.**

Registration must take place prior to the deadline as posted at the Skills BC website.

ADDITIONAL INFORMATION

If you have any questions regarding the Skills BC (Regional) Competition or this contest, please contact Skills BC or the technical chair (byu@vsb.bc.ca) two weeks before the event.