



# Robotics & Automation Technology

**Purpose:** To evaluate each competitor's preparation for employment in the arena of robotics and automation with emphasis on the team approach to problem-solving in a work environment. To recognize outstanding performance in the use of new work styles and technology by competitors.

<b>On-Site/Off-Site</b>	<ul style="list-style-type: none"><li>▪ On-Site</li></ul>
<b>Contest Date</b>	<ul style="list-style-type: none"><li>▪ 4/9/2024</li></ul>
<b>Contest Location</b>	<ul style="list-style-type: none"><li>▪ Convention Center</li><li>▪ C-Hall</li></ul>
<b>Early/Normal Start Time</b>	<ul style="list-style-type: none"><li>▪ Normal Start Time</li><li>▪ Registration will open at 8:00am. Please report to B-Hall Show Office for Registration. Competition will begin at 10:00am.</li></ul>
<b>Contest Open/Closed</b>	<ul style="list-style-type: none"><li>▪ Open</li><li>▪ Exhibit Halls do not open to observers until 12:00pm.</li></ul>
<b>Eligibility</b>	<ul style="list-style-type: none"><li>▪ Schools may send one (1) team of two (2) competitors for every 50 paid SkillsUSA members based on local competition enrolled in a program where the scope of the contest described in the SkillsUSA Technical Content Standards reflects a major component of the program. Please refer to the National Technical Standards for more eligibility details on this contest.</li></ul>
<b>Competition Clothing (To be worn on Day 1)</b>	Work/School Attire: <ul style="list-style-type: none"><li>▪ Field specific work clothing required for the work environment or that matches the service conditions for the contest.</li></ul>

	<ul style="list-style-type: none"> <li>▪ This may include jeans if they are clean and professional looking and are accepted in the respective field (no holes or overly soiled pants).</li> <li>▪ Shoes or work boots with a hard sole and anti-slip properties.</li> <li>▪ Clothing should be as such that it will not get caught in moving equipment or power tools.</li> <li>▪ Professional attire worn in the classroom (school uniforms) such as a criminal justice uniform, chef attire, health scrubs, or cosmetology scrubs etc. may be worn if they meet the above requirements.</li> <li>▪ Note: School identifiers and contestant names must be covered.</li> </ul>
<b>Safety Equipment Required</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>
<b>Awards Ceremony Attire (To be worn on Day 2)</b>	<p>SkillsUSA Official Attire:</p> <ul style="list-style-type: none"> <li>▪ Official SkillsUSA red blazer</li> <li>▪ Button-up, collared, white dress shirt (accompanied by a plain, solid black tie or SkillsUSA black tie), or white shirt (collarless or small-collared), with any collar not to extend into the lapel area of the blazer</li> <li>▪ Black dress slacks or black dress skirt (knee-length at minimum)</li> <li>▪ Black closed-toe dress shoes</li> <li>▪ Note: Wearing socks or hose is no longer required. If worn, socks must be black dress socks, and hose must be either black or skin-tone and seamless/nonpattern</li> </ul> <p>Or,</p> <p>Business Dress:</p> <ul style="list-style-type: none"> <li>▪ Blazer, sports coat, or dress</li> <li>▪ Button-up, collared, white dress shirt (accompanied by a plain, solid black tie or SkillsUSA black tie), or white shirt (collarless or small-collared), with any collar not to extend into the lapel area of the blazer</li> <li>▪ Dress slacks or dress skirt (knee-length at minimum)</li> <li>▪ Closed-toe dress shoes</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Note: Wearing socks or hose is no longer required. If worn, socks must be black dress socks, and hose must be either black or skin-tone and seamless/nonpattern</li> </ul>
<b>Testing</b>	<ul style="list-style-type: none"> <li>▪ There is no written test required for this competition.</li> </ul>
<b>Provided by Contestant (Tool List)</b>	<p>Personal Tools:</p> <ul style="list-style-type: none"> <li>▪ Industrial Robot (6-Axis) with safety enclosure, area scanner, or light stack and gripper with the ability to open at least ½" (any collaborative robots must use a teach pendant. You may NOT manually move the robot into position</li> <li>▪ Access to a minimum of 6 I/O points (3 In/3 Out)</li> <li>▪ Air Supply (if required for End-of-Arm-Tooling)</li> <li>▪ Small Phillips and Straight Screwdriver</li> <li>▪ Wire Cutters</li> <li>▪ Wire Strippers</li> <li>▪ Pliers</li> <li>▪ Needle Nose Pliers</li> <li>▪ Measuring device (tape measure, calipers, ruler, etc.)</li> <li>▪ 12" Straight Edge</li> <li>▪ Painters/Masking Tape</li> <li>▪ Two (2) or more pens/pencils (sharpened)</li> <li>▪ Laptop (if required to run/operate the contestant's robot)</li> <li>▪ Safety Glasses</li> <li>▪ One hard copy of a 1-page typed resume</li> <li>▪ *Contest evaluator will supply the objects for the competition.</li> </ul>
<b>Contest Notes, Themes, &amp; Deadlines</b>	<ul style="list-style-type: none"> <li>▪ In view of the complexity and length of this contest, it will be necessary to be ready to start the contest on time and it is required that your equipment is setup and checked out before the contest starts. Your instructor may enter the contest area the morning of the contest, before it starts, for the purpose of setting up your equipment and ensuring its serviceability.</li> <li>▪ All robots must be either in a safety enclosure, have an area scanner, or have a light stack indicating its run status.</li> <li>▪ Devices supplied by the technical committee will not be disassembled or opened for any reason unless explicitly directed to do so by the contest officials. Disqualification will result if this is not adhered to.</li> </ul>

<p style="text-align: center;"><b>Special Notes</b></p>	<ul style="list-style-type: none"> <li>▪ Starting in 2024, all State Contests will begin to add a scenario-based component.</li> <li>▪ Contact with Contest Coordinators is prohibited. Contact with Contest Coordinators outside of the SkillsUSA Ohio office may result in contestant disqualification.</li> <li>▪ All safety requirements will be heavily enforced. Violation may result in contestant disqualification.</li> <li>▪ No smart watches and/or phones are permitted during the contest and/or in contest.</li> <li>▪ No contact with anyone outside of the contest area once the contest begins.</li> <li>▪ No inappropriate communication between contestants such as verbally degrading another contest.</li> <li>▪ No cheating on any portion of the contest such as informing another contestant of the skills/test prior to competing.</li> <li>▪ Starting in 2024, Wi-Fi is provided for contests where it is required for contest success.</li> </ul>
<p style="text-align: center;"><b>National Technical Standards</b></p>	<ul style="list-style-type: none"> <li>▪ Please refer to the 2023-2024 National Technical Standards for all contests. Any and all standards included may be tested in any competition.</li> <li>▪ In conjunction with National Standards, violations may result in student loss of contest.</li> </ul>
<p style="text-align: center;"><b>Resume/Interview Requirement</b></p>	<ul style="list-style-type: none"> <li>▪ All SkillsUSA Ohio State Championship Contests will require a short interview component. Students should be prepared with basic job interview skills.</li> <li>▪ All contestants must have a hard copy of a one (1) page personal resume.</li> </ul>