

# Mechatronics



**Purpose:** To evaluate each team's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of Mechatronics.

<b>Contest Location</b>	<ul style="list-style-type: none"><li>▪ C-Hall</li></ul>
<b>Eligibility</b>	<ul style="list-style-type: none"><li>▪ Please refer to the National Technical Standards for this contest. .</li><li>▪ *Team of 2 (two)<ul style="list-style-type: none"><li>• May send 3 competitors per school</li></ul></li></ul>
<b>Clothing</b>	<p><u>Work Attire:</u> Field specific work clothing required for the work environment or that matches the service conditions for the contest. This may include jeans if they are clean and professional looking and are accepted in the respective field (no holes or overly soiled pants). Work shoes or boots with a hard sole or anti-slip properties (steel toes may be required – refer to <b>Provided by Contestant</b> section below). Clothing should be as such that it will not get caught in moving equipment or power tools. School uniforms may be worn if they meet the above requirements with all identifiers covered.</p>
<b>Testing</b>	<ul style="list-style-type: none"><li>▪ Students should be prepared to take a written knowledge test.</li><li>▪ Students should be prepared to take a written SkillsUSA knowledge test. (Provided to all contestants)</li></ul>

<p><b>Provided by Contestant (Tool List)</b></p>	<p><u>Documentation</u></p> <ul style="list-style-type: none"> <li>▪ One copy of a 1-page typed personal résumé</li> </ul> <p><u>Mechatronics Technical Committee provide</u></p> <ul style="list-style-type: none"> <li>▪ Mechanical, fluid power and electronic components</li> <li>▪ FluidSIM software</li> <li>▪ 24 VDC 2 A&lt;P Power supply (for above components)</li> <li>▪ Terminal Strip</li> <li>▪ Status Box</li> <li>▪ Integration cables and patch cords (for above components)</li> <li>▪ Pneumatic tubing and cutter</li> <li>▪ Mini Compressor</li> <li>▪ Assorted electron-pneumatic devices</li> <li>▪ Circuit Schematics</li> </ul> <p><u>Teams provide</u></p> <ul style="list-style-type: none"> <li>▪ Pen/Pencil</li> <li>▪ Safety Glasses</li> <li>▪ Multimeter</li> <li>▪ Small Screw Drivers (Phillips and Straight Slotted)</li> <li>▪ Wire Cutter/Stripper</li> <li>▪ Allen Wrench Set (Inch and Metric)</li> <li>▪ Open-Ended Wrenches (Inch and Metric)</li> <li>▪ Appropriate Work Clothing</li> </ul>
<p><b>Special Notes</b></p>	<ul style="list-style-type: none"> <li>▪ Competition will start immediately after orientation.</li> <li>▪ Exhibit Halls do not open to observers until 12:00 pm.</li> <li>▪ No instructors are permitted inside the contest area.</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> </ul>
<p><b>National Technical Standards</b></p>	<ul style="list-style-type: none"> <li>▪ Please refer to the 2022-2023 National Technical Standards for all contests. Any 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>

**Resume**

- All SkillsUSA Ohio State Championship Contest will require a short interview component. Students should be prepared with basic job interview skills.