



Mechatronics

To evaluate each team's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of mechatronics. Mechatronics is a career and technical education discipline that combines the industrial skills of mechanics, electronics, and computer-based controls with a team-oriented approach to problem solving. Skilled mechatronic technicians are required for the maintenance, repair, and operation of modern automated manufacturing systems.

On-Site/Off-Site	<ul style="list-style-type: none"> ● On-Site
Contest Date	<ul style="list-style-type: none"> ● 5/5/2026
Contest Location	<ul style="list-style-type: none"> ● Convention Center ● C-Hall
Early/Normal Start Time	<ul style="list-style-type: none"> ● Normal Start Time ● Registration will open at 8:00am. Please report to B-Hall Show Office for Registration. All items set up and checked in by 10:00am.
Contest Open/Closed	<ul style="list-style-type: none"> ● Open ● Exhibit Halls do not open to observers until 12:00pm.
Eligibility & Contest Type	<ul style="list-style-type: none"> ● Please refer to the Program Guidelines for eligibility- https://www.ohioskillsusa.org/resources/ ● Straight to State Contest (No Regional Qualifier)
Clothing	<p><u>For Competition Day the Dress Code is:</u> Class D</p> <p><u>For the Awards Ceremony the Dress Code is:</u> Class A or Class J</p> <ul style="list-style-type: none"> ● SkillsUSA Ohio Clothing Guide
Safety Equipment Required	<ul style="list-style-type: none"> ● N/A
Testing	<ul style="list-style-type: none"> ● Students should be prepared to take a written knowledge test.

<p>Provided by Contestant (Tool List)</p>	<ul style="list-style-type: none"> ● Mechatronics Technical Committee provides: All physical hardware and software necessary to run the competition. <p>Provided by Contestants:</p> <ul style="list-style-type: none"> ● One copy of a 1-page typed personal résumé (Each Contestant) ● Pen/Pencil ● Safety Glasses Multimeter Small Screw Drivers (Phillips, Straight Slotted) Wire Cutter/Stripper ● Allen Wrench Set (inch and Metric) ● Open ended wrenches (inch and Metric). ● Laptop or PLC programming device with required software and cables. ● All teams must supply all required power cords, wiring, and connectors.
<p>Contest Notes, Themes, & Deadlines</p>	<p>Team Provided:</p> <ul style="list-style-type: none"> ● One (1) PLC assembly. Teams will be required to write a PLC program. This necessitates each team to provide its own PLC assembly and programming device/software (e.g., laptop computers or hand-held programming devices). The PLC assembly must meet the following requirements: ● Power supply: The PLC must be capable of operating at 24VDC, or 120VAC rated for 5 Amps. All 120VAC units must be wired ahead of time to an inline ground-fault interrupter device and standard (NEMA 5-15P) 120VAC line cord. All 120VAC wiring must meet PLC manufacturer's requirements and follow standard industry practice. Judges reserve the right to disallow the use of any competitor supplied equipment that presents a safety hazard. No line cords or 120VAC wiring devices will be supplied at the competition. ● PLC shall have a minimum of 4 digital inputs and 4 digital outputs. o Inputs shall be 24VDC Sinking (inputs shall be activated by application of a +24VDC signal to the input terminal). ● Outputs shall be 24VDC Sourcing (outputs shall supply a +24VDC signal to the load when activated). All loads will be returned to ground. Output capacity shall be no less than 0.5A, each. focus on core PLC programming, system integrations, and trouble shooting.
<p>WIFI Provided?</p>	<ul style="list-style-type: none"> ● No
<p>Special Notes/Rules for All Contests</p>	<ul style="list-style-type: none"> ● Starting in 2024, all Skilled Trade State Contests (most leadership contests already use scenarios) will begin to add a scenario-based component. ● <u>Wi-Fi will NOT BE AVAILABLE unless listed above.</u> If you need WIFI access, please plan to bring a hotspot. ● All safety requirements will be heavily enforced. Competitors are to follow all safety standards and OSHA Regulations

	<p style="text-align: center;">Contestants <i>MUST HAVE A COPY OF THEIR EMERGENCY MEDICAL FORM IN THEIR NAME BADGE AT ALL TIMES</i></p> <p style="text-align: center;"><u>THE FOLLOWING ITEMS ARE PROHIBITED; VIOLATION OF ANY OF THE FOLLOWING MAY RESULT IN COMPETITOR DISQUALIFICATION:</u></p> <ul style="list-style-type: none"> - Contact with Contest Coordinators is prohibited. - Contact with Contest Coordinators outside of the SkillsUSA Ohio is strictly prohibited. - Possession of smart watches and/or phones during the contest and/or in contest. - Contact with anyone outside of the contest area once the contest begins. - Inappropriate communication between contestants such as verbally degrading another contest. - Cheating on any portion of the contest such as informing another contestant of the skills/test prior to competing. - Lack of Copy Emergency Medical Form in Name Badge.
<p style="text-align: center;">National Technical Standards</p>	<ul style="list-style-type: none"> ● Please refer to the 2024-2026 National Technical Standards for all contests. All standards included may be tested in any competition. ● In conjunction with National Standards, lack of understanding of State Level competition standards (this document) may result in student loss of contest.
<p style="text-align: center;">Resume/Interview Requirement</p>	<ul style="list-style-type: none"> ● All SkillsUSA Ohio State Championship Contests will require a short interview component. Students should be prepared with basic job interview skills. ● All contestants <u>must have a hard copy</u> of a one (1) page personal resume.