



Mechatronics

Purpose: 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">4/9/2024
Contest Location	<ul style="list-style-type: none">Convention CenterC-Hall
Early/Normal Start Time	<ul style="list-style-type: none">Normal Start TimeRegistration will open at 8:00am. Please report to B-Hall Show Office for Registration. Orientation will begin at 10:00am.
Contest Open/Closed	<ul style="list-style-type: none">OpenExhibit Halls do not open to observers until 12:00pm.
Eligibility	<ul style="list-style-type: none">Schools may send three (3) teams of two (2) competitors per school (Building IRN) 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.
Competition Clothing (To be worn on Day 1)	Work/School Attire: <ul style="list-style-type: none">Field specific work clothing required for the work environment or that matches the service conditions for the contest.

	<ul style="list-style-type: none"> ▪ This may include jeans if they are clean and professional looking and are accepted in the respective field (no holes or overly soiled pants). ▪ Shoes or work boots with a hard sole and anti-slip properties. ▪ Clothing should be as such that it will not get caught in moving equipment or power tools. ▪ 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. ▪ Note: School identifiers and contestant names must be covered.
<p style="text-align: center;">Safety Equipment Required</p>	<ul style="list-style-type: none"> ▪ Safety glasses with side shields or goggles (Prescription glasses can be used only if they are equipped with side shields. If not, they must be covered with goggles).
<p style="text-align: center;">Awards Ceremony Attire (To be worn on Day 2)</p>	<p>SkillsUSA Official Attire:</p> <ul style="list-style-type: none"> ▪ Official SkillsUSA red blazer ▪ 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 ▪ Black dress slacks or black dress skirt (knee-length at minimum) ▪ Black closed-toe dress shoes ▪ 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 <p>Or,</p> <p>Business Dress:</p> <ul style="list-style-type: none"> ▪ Blazer, sports coat, or dress ▪ 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 ▪ Dress slacks or dress skirt (knee-length at minimum) ▪ Closed-toe dress shoes

	<ul style="list-style-type: none"> 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
Testing	<ul style="list-style-type: none"> Students should be prepared to take a written knowledge test.
Provided by Contestant (Tool List)	<p>Documentation:</p> <ul style="list-style-type: none"> One copy of a 1-page typed personal résumé <p>Mechatronics Technical Committee provides:</p> <ul style="list-style-type: none"> All physical hardware and software necessary to run the competition. <p>Teams provide:</p> <ul style="list-style-type: none"> Pen/Pencil Safety Glasses Multimeter Small Screw Drivers (Phillips and Straight Slotted) Wire Cutter/Stripper Allen Wrench Set (Inch and Metric) Open-Ended Wrenches (Inch and Metric) Appropriate Work Clothing
Contest Notes, Themes, & Deadlines	<ul style="list-style-type: none"> The 2024 competition will incorporate one new rotation using Allen Bradley PLCs and Studio 5000 Software. Students will be required to write a simple program that allows the PLC to control a small automation conveyor with sensors. All hardware and software will be provided.
Special Notes	<ul style="list-style-type: none"> Starting in 2024, all State Contests will begin to add a scenario-based component. Contact with Contest Coordinators is prohibited. Contact with Contest Coordinators outside of the SkillsUSA Ohio office may result in contestant disqualification. All safety requirements will be heavily enforced. Violation may result in contestant disqualification. No smart watches and/or phones are permitted during the contest and/or in contest. No contact with anyone outside of the contest area once the contest begins.

	<ul style="list-style-type: none"> ▪ No inappropriate communication between contestants such as verbally degrading another contest. ▪ No cheating on any portion of the contest such as informing another contestant of the skills/test prior to competing. ▪ Starting in 2024, Wi-Fi is provided for contests where it is required for contest success.
National Technical Standards	<ul style="list-style-type: none"> ▪ Please refer to the 2023-2024 National Technical Standards for all contests. Any and all standards included may be tested in any competition. ▪ In conjunction with National Standards, violations may result in student loss of contest.
Resume/Interview Requirement	<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 must have a hard copy of a one (1) page personal resume.