

Robotics: Urban Search and Rescue



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

<p>Contest Location</p>	<ul style="list-style-type: none"> ▪ C-Hall <p>** Contest in A, B, C or D Hall will not be able to leave for lunch, please select "Contestant Plus" when registering or having contestant prepared to purchase lunch with credit card at vendors in the Exhibit Hall.</p>
<p>Special Notes</p>	<ul style="list-style-type: none"> ▪ Exhibit Halls do not open to observers until 12:00 pm. ▪ No smart watches and/or phones are permitted during the contest and/or in the contest ▪ No contact with anyone outside of the contest area once the contest begins ▪ No inappropriate communication between contestants such as verbally degrading another contestant ▪ No cheating on any portion of the contest such as informing another contestant of the skills/test prior to competing.
<p>Testing</p>	<ul style="list-style-type: none"> ▪ N/A
<p>Eligibility</p>	<ul style="list-style-type: none"> ▪ Please refer to the National Technical Standards for this contest. <ul style="list-style-type: none"> ○ Schools may send one competitor or team 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. ○ Leadership and Occupationally Related Contest Specifications <ul style="list-style-type: none"> - The following competitions are open to all members of SkillsUSA Schools may send one competitor or team for every 500 SkillsUSA members based on local competition.
<p>Clothing</p>	<ul style="list-style-type: none"> • Official SkillsUSA Dress – <p>*Red SkillsUSA blazer, windbreaker, or sweater, or black or red SkillsUSA Jacket</p>

	<ul style="list-style-type: none"> • Button-up, (collarless or small-collared) or white turtleneck, with any collar not to extend into the lapel area or the blazer, sweater, windbreaker, or jacket. • Black dress slacks (accompanied by black dress socks or black or skin-tone hose) or black dress skirt (knee-length, accompanied by black or skin-tone seamless hose). • Black dress shoes. ▪ <u>Business Dress Casual</u> – <ul style="list-style-type: none"> • Official SkillsUSA white polo shirt or White Button Down shirt. • Black dress slacks (accompanied by black dress socks or black or skin-tone seamless hose) or black dress skirt (knee-length, accompanied by black or skin-ton seamless hose). • Black leather closed-toe dress shoes.
<p style="text-align: center;">Provided by Contestant (Tool List)</p>	<ul style="list-style-type: none"> ▪ 50 ft UL approved extension cord and surge protector ▪ Only tools on Robotics: Urban Search and Rescue standard ▪ Safety equipment — eye protection is always required in the contest area ▪ 25-foot UL approved extension cord ▪ Laptop computer (optional) for technical presentation purposes only. Laptop not used for robot operation. ▪ Fully assembled, tested, and operational ordnance disposal robot conforming to the guidelines and parts restrictions listed in this document (see “Urban Search and Rescue Challenge Kit Bill of Materials” in Appendix) ▪ Presentation software for oral presentation to judges (optional) ▪ CAD/CAM software for blueprint design (optional) ▪ Completed Engineering Notebook <i>Note:</i> Technical drawing/blueprint of robot drive chassis must be included in notebook ▪ Video Camera attached to Robot ▪ Video Camera receiving unit capable of connecting to LED Video Display Screen supplied by Technical Committee, or goggles, tablets or handheld devices may be used. ▪ Pens, pencils, and paper ▪ Tools: <ul style="list-style-type: none"> ▪ Allen wrench set (English) ▪ Clamping vise ▪ Metal tin snips ▪ Power strip

	<ul style="list-style-type: none"> ▪ Calculator ▪ Tape measure ▪ Hammer ▪ Metal file ▪ Flat-head and Phillips-head screwdrivers ▪ Wire strippers (one set) ▪ Wire cutters/snips (one set) ▪ Roll of electrical tape ▪ 4" nylon wire ties (25 pack) ▪ Multimeter ▪ Multinut pliers ▪ Metal-cutting hacksaw (manual) ▪ Cordless drill with charger ▪ Set of standard drill bits ▪ Pliers (needle nose or regular) ▪ Set of box wrenches ▪ ▪ Note: ONLY the above listed items will be allowed in the contest area during the competition.
<p style="text-align: center;">Competition Standards</p> <p>(Not all will be tested but contestant should be knowledgeable of all)</p>	<ul style="list-style-type: none"> ▪ Please refer to the National Technical Standards
<p style="text-align: center;">Resume Required</p>	<ul style="list-style-type: none"> ▪ In conjunction with National Standards, violations may result in student loss of contest. ▪ All SkillsUSA Ohio State Championship Contest will require a short interview component. Students should be prepared with basic job interview skills.