

# ROBOTICS AND AUTOMATION TECHNOLOGY

**CONTEST DATE & LOCATION:** Refer to the Kansas State Championship Conference Packet

**PURPOSE:** To evaluate each contestant's preparation for employment in the emerging 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 contestants.

**ELIGIBILITY:** Open to a team of two active SkillsUSA members enrolled in programs with robotics, automation and/or manufacturing as the occupational objective

**CLOTHING REQUIREMENT:** There are specific clothing requirements, such as official SkillsUSA Kansas T-shirt with clean blue jeans. Although not required, contestants may wear the official uniform of SkillsUSA which is khaki work shirt and pants; black, brown or tan leather work shoes; and safety glasses (clear lenses) 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.)

Official SkillsUSA khaki work shirt and pants



**NOTE:** The Official Kansas State T-shirt will be mailed to schools prior to the competition.

## KANSAS STATE CHAMPIONSHIPS (KSC) CONTEST UPDATE



### CONTEST TOOL LIST:

Supplied by the Contestants:

- Computer
- Wire cutters/diagonals 3" to 6"
- Screwdrivers (3" to 6" blade length)
  - Common set to include 1/8", 1/4" and 3/8" minimum
  - Phillips set to include No. 0, No. 1 and No. 2 minimum
- Long nose /needle nose pliers 3" to 6"
- Wire strippers
- Safety glasses – clear lenses (two pairs)
- Hookup wire, 20-24 AWG, red, black yellow, blue and green (other colors may be substituted), 150' each color.
- Allen wrenches, set to include 5mm, 3mm and 7/64" minimum
- Multimeter with leads
- Two pencils (sharpened)
- 6" or 12" ruler
- Power screwdriver or drill with screwdriver bits to mount fixtures to work surface
- One-page hard copy resume

NOTE: Each team must supply at least one laptop computer to complete programming required. The computer should have all security software disabled and the team should have any necessary passwords for the machine. The one computer should be equipped with the following:

- Pentium 4, 1 GHz processor or higher with CD-ROM drive
- 1 GB RAM (or more)
- 100 MB available on the hard disk
- Operating system: Windows XP
- Super VGA or better graphics display, minimum 256 colors
- Mouse
- USB port

The team is to check the SkillsUSA Championships update at this link frequently for updates:

<https://www.skillsusa.org/competitions/skillsusa-championships/contest-updates/>

Refer to the Technical Standards for further guidelines.