

Internet of Things Contest Information (formerly called Residential Systems Installation)

by Mitchell Thomas — last modified Mar 5, 2023

Note: The competition location Tulsa Technology Center – Riverside Campus!

Written testing for most contests will be held ON-LINE through your schools' Testing Liaison. Testing will be open beginning Monday, March 15th.

Students will receive an email from National Skills USA for testing.

The deadline for taking the on-line tests is Friday, April 7th.

No provisions are being made for make-up testing on-site.

NO Substitutions will be allowed this year after April 7th

See the State SkillsUSA Director's Memo for the policy on substitutions and late registrations.

Each contestant will be required to bring his or her printed resume. It will be presented to the judges upon entry to the contest area. A deduction will be applied to your overall score if you do not have a resume

Contestant Meeting will be held in the contest area at Tulsa Tech Riverside Campus, 1:00 PM on Sunday, April 23, 2023.

Official Attire for IOT:

- Skills USA White Polo Shirt (Tucked In) or
- White Button Up Shirt with a tie, or white blouse for females, with the SkillsUSA Red Blazer.
- Black Slacks
- Black Belt
- Black Socks
- Black Dress Shoes

Contest Attire: There will be drilling and construction type work during the competition, so contestants can wear school appropriate clothing during the competition on Monday, April 24, 2023.

SUPPLIED BY THE TECHNICAL COMMITTEE

Mock walls for Wifi Thermostat and equipment to be installed on contestant walls.

SUPPLIED BY THE CONTESTANT

Contestants will need to bring the following tools and materials: Required Tools (Not to be shared among contestants):

- Hard Hat
- Safety Glasses
- Laptop Computer w/RJ-45 NIC Port (Needed to configure SOHO Device) w/ charged battery and charger
- Cordless Electric Drill and 2 batteries that are fully charged & charger
- Drill index set (Range 1/16" to 1/2") twist drill bits
- Screw Driver Set (Flat Tip, Phillips, & Torx) Sizes #1 & #2
- Nut Driver Set or SAE Hex Socket/Ratchet Set
- Torpedo level
- Tape measure 25'
- 12' to 24' 3 Prong Electrical Extension Cord
- Marking pencil to mark holes to be drilled or cutouts
- Paper & Pen for writing notes
- Roll of Electrical Tape (Black)
- Electrician's Scissors
- Wire Strippers (12-20 AWG and 20-26 AWG)
- Small Needle Nose Pliers
- Small Diagonal Cutters
- Large Diagonal Cutters
- Linesman Pliers
- Claw Hammer (Typical 13oz. or something close to this)
- RJ-45 crimper of contestant's choice (Yes, you can bring EZ-RJ45's)
- 110 Punch-Down Tool
- F-Type Connector Tool (similar to Ideal Tools model 35-046)
- F-Type Compression Crimper (must work with F-Type compression connector you bring)
- 2-Step Coaxial Stripping Tool
- UTP Cable Continuity Tester (for testing your Cat5e or Cat6 cables for basic continuity)
- Multi-Meter w/continuity setting or F-Type Cable Tester (for testing your RG-6 Coax cable for basic continuity)
- Small Plastic Trash Bag
- Contestant Wall, specs are located on page four of this document.
- Bottled Water and Snacks (It's going to be a long day and you're going to get thirsty and hungry)
- Band-Aids

Consumable Items (Not to be shared among contestants):

• RJ-45 Connectors (Qty. of 6) Yes, you can bring EZ-RJ45's if you so choose

- F-Type Compression Connector (Qty. of 6) needed for RG-6 Quad shield Coax Cable
- 12" Long Plastic/Nylon Zip Ties (Qty. of 10)

Additional Items: Any other tools the contestant chooses to bring is solely up to them.

CONTEST GUIDELINES

The contest will consist of an online SkillsUSA (PDP) knowledge test, online written test covering knowledge of Home Technology Integration principles and installation of smart home devices and infrastructure.

Specific scores:

Antenna Installation	100 pts
Structured Cabling/Grounding	200 pts
SOHO Device Install	100 pts
Ring Door Bell	100 pts
A/C Plug and Light	100 pts
WIFI Thermostat	100 pts
Amazon Dot	100 pts
Overall Finish & Follow-up	75 pts
Written Test	100 pts
PDP Test	25 pts

INDUSTRY AWARDS

Awards will be provided by Lowes.

CONTEST DESCRIPTION AND SCORING

The written test will contribute 10% to the overall score, 87.5% for functionality and installation of equipment. The SkillsUSA PDP test will be 2.5% of the overall total.

CONTESTANT WALL

