



2024 SkillsUSA Michigan State Championships

Robotics and Automation

Contest Description

Task and Materials List

CONTEST LOCATION:

Grand Rapids Community College
Applied Technology Center (ATC) Room TBD
151 Fountain NE
Grand Rapids, MI, US
(616) 234-GRCC
<http://www.grcc.edu/>

RESUME:

Each student must submit a one-page printed resume before the contest start at the contest site (present to contest coordinator, not judges). The resume is no longer submitted online. This is the only time that resumes can be turned in. Failure to do so will result in a 10-point penalty.

TASKS THAT MAY BE PERFORMED

A. Perform an analysis of task

1. Evaluate written task
2. Evaluate provided equipment and material
3. Evaluate system revision

B. Design, Sketch and Plan

1. Determine sequence of operation
2. Select equipment and material to meet functional need
3. Create Flow Chart
4. Create layout
5. Create Input and Output Assignment
6. Draw block Diagram
7. Process system revision

C. Presentation

1. Demonstrate your presentation skills as a team, using all paperwork and sketches.

D. Implement Design

1. Develop robot program
2. Layout Cell from Design
3. Utilized the Objects Given

E. System Performance

1. Perform functional test for total system operation
2. Present system for evaluation
3. Perform functional test to meet revision requirements
4. Present revised system for evaluation

TOOLS THAT CONTESTANTS MUST BRING

- Small Phillips and Straight Screwdriver
- Wire Cutters
- Wire Strippers
- Pliers
- Needle Nose Pliers
- Measuring Device (Tape Measure, Calipers, Ruler, etc.)
- 12" Straight Edge
- Painters/Masking Tape
- 2 or more Pens/Pencils (sharpened)
- Safety Glasses
- 1 copy of typed personal résumé

CONTEST:

Saturday, April 13, 2024:

The competition will be held at 8:00 am at:

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