



Mechatronics - Secondary

2024 SkillsUSA Michigan State Championships Contest Description Task and Materials List

CONTEST LOCATION AND TIME:

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

DOCUMENT REQUIREMENTS:

RESUME:

Each student must submit a one-page printed resume before the contest start at the contest site (present to contest coordinator, not judges). This is the only time that resumes can be turned in. Failure to do so will result in a 10-point penalty.

TECHNICAL COMMITTEE WILL SUPPLY:

- 1 Festo MecLab Kit Complete will accommodate up to 4 teams
- 4 Laptop Computers for MecLab FluidSIM Software

CONTESTANTS MUST SUPPLY:

- 1 copy of typed personal résumé
- Safety Glasses

CLOTHING REQUIREMENTS:

- Leather work boots or shoes (No athletics)
- Appropriate work attire
- Safety glasses or side shields

TASKS TO BE PERFORMED:

Written Test: Choose the correct multiple-choice answer for each Mechatronics related question.

Electrical Symbols Test: Correctly identify different electrical symbols.

MecLab Test: Contestants will be required to design and build a series of electro-pneumatic circuits. You will be evaluated on the performance of the task. You will need to explain your work.

Troubleshooting Test: Contestants will be required to diagnose issues with an electro-pneumatic circuit. You will be evaluated on the performance of the task. You will need to explain your work.