Actuator and Sensor Systems

Course Information

Developers: Automation Engineer Technology State Curriculum Committee

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KBOR Facilitators: Rita Johnson/ Shirley Antes/ April Henry/ Lisa Beck

Business & Industry Liaison: Steve Reed – KASA Companies, Ronald Owings – Spirit Aerosystems and Mike Hart – Spirit Aerosystems

Credit Hours: 3

Description:

This course examines types, installation and troubleshooting of industrial actuators and sensors. Contemporary control methods in process control and proportional-integral-derivative (PID) process loops are covered in this course.

Competencies

1. Demonstrate the safety procedures when working with automated controls
2. Identify the components of a closed loop system
3. Describe the principles of a proportional-integral-derivative (PID) process loop
4. Describe the types and operation of control system input devices
5. Describe the types and operation of control system output devices
6. Select the proper wiring and cabling of actuators and sensors
7. Demonstrate the operation of actuators and sensors in a closed loop system
8. Demonstrate the process of control system troubleshooting