Supplemental Material

Capstone Project Industrial Technology

Assignment Objectives

1. Understand the use of digital and analog sensors as inputs to a Programmable Logic Controller (PLC)
2. Demonstrate proper wiring management and labeling
3. Demonstrate proper selection of inputs to the PLC
4. Create a logic program for your process
5. Program the PLC using proper programming methods (commenting, subroutines, etc.)
6. Understand how to program physical outputs of the PLC
7. Understand the limitations of the PLC outputs (current, voltage, etc)
8. Modify the outputs to overcome limitations (i.e. relays, switches, controllers, etc.)
9. Demonstrate the working process
10. Present the project to peers

Assignment Rubric (100%)

Presentation (40%)

1. Introduction
2. Objectives
3. Process Flow Chart
4. Input and Outputs
5. One In-Depth Concept
6. Process Demonstration
7. Future Work/Improvements
8. Effectively Answer Questions

Programming (25%)

1. Labeling/Commenting
2. Logic

Physical Trainer Assembly (25%)

1. Wire Management
2. Wire Labeling
3. Proper Hardware
4. Proper Hardware Assembly
5. Successful Operation

Engagement (10%)

1. Peer Evaluation
2. Communication