SUNY Canton College, Electrical Engineering Technology **ELEC 141 Industrial Controls**

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Industrial Controls, Assignment	
Due Date:	(Depending on your scheduled lab section)

The assignment requires the student to draw control circuits that meet the requirements specified. Each circuit drawing requires proper symbols and labels. Each circuit drawing will have a title. The drawings will be graded on accuracy and neatness. Completing this assignment will also help the student to prepare for the laboratory practical exam.

Control drawing 1.

Internal Control circuit for an Across the line Magnetic Starter (ATLMS)

Control drawing 2.

External control circuit diagram for an across the line magnetic starter with 1 stop, and 1 start momentary pushbutton.

Control drawing 3.

External control circuit diagram for an across the line magnetic starter with 1 stop, 1 start, and 1 jog momentary pushbutton. (Implement jog circuit #1 design)

Control drawing 4.

External control circuit diagram for an across the line magnetic starter with 1 stop, 1 start, and 1 jog momentary pushbutton. (Implement jog circuit #2 design)

Control drawing 5.

Internal Control circuit for a Reversing Across the line Magnetic Starter (RATLMS)

Control drawing 6.

External control circuit diagram for a reversing across the line magnetic starter with 1 stop, 1 reverse, and 1 forward momentary pushbutton. (implement coil interlock design)

Control drawing 7.

External control circuit diagram for a reversing across the line magnetic starter with 1 stop, 1 reverse, and 1 forward momentary pushbutton. (implement pushbutton interlock design)

Control drawing 8.

External control circuit diagram for a reversing across the line magnetic starter with 1 stop, 1 reverse, 1 forward, 1 jog forward, and 1 jog reverse momentary pushbutton. (implement coil interlock, and jog circuit #1 design)

Control drawing 9.

External control circuit diagram for a reversing across the line magnetic starter with 1 stop, 1 reverse, 1 forward, 1 jog forward, and 1 jog reverse momentary pushbutton. (implement pushbutton interlock, and jog circuit #1 design)

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Control drawing 10.

<u>External</u> control circuit diagram for a reversing across the line magnetic starter with 1 stop, 1 reverse, 1 forward, 1 jog forward, and 1 jog reverse momentary pushbutton. (implement coil interlock, and jog circuit #2 design)

Control drawing 11.

<u>External</u> control circuit diagram for a reversing across the line magnetic starter with 1 stop, 1 reverse, 1 forward, 1 jog forward, and 1 jog reverse momentary pushbutton. (implement pushbutton interlock, and jog circuit #2 design)