

Module Learning Sequence

Course Number and Title:	IND220 Electrical Prints & Troubleshooting		
Module # and Topic Title:	Module #5: PLC Operation and Troubleshooting		
Semester:	Any – Last updated – 11/9/20		
ACTIVITY	DESCRIPTION	TIME ON TASK	POINTS
Reading Activity	Troubleshooting Electrical/Electronic Equipment, by Mazur and Proctor, Third Edition: <i>Chapter 25</i> – Programmable Controllers; *Processor Modes, *Status Indicators, *Input/Output Status Indicators, *Operating and Fault Status Indicators, *Force and Disable, *Troubleshooting Input Devices, *Troubleshooting Output Devices	Est. TOT 4.0 Hr.	
Learning Activity	Learning Activities: * PDF: IND220 Module 5 SLC-500 Hardware Basics.pdf * PDF: IND220 Module 5 Allen Bradley Timer Basics.pdf * Video: Loading 500 Emulate_RSLink Driver_Online with RSLogix500 * Video: IND220 M5 Explanation of Lab 5.1 PLC Simulation * Video: Creating OPC Topic in RSLink for Virtual PLC Simulator * Video: IND220 M5 Explanation of PLC Program in Lab 5.2 * IND220 Module 5 PLC_SLC500 Basics.pdf	Est. TOT 6.0 Hr.	
KAA	IND220 Module 3 KAA Study Guide.pdf IND220 Module 3 KAA Practice Quiz IND220 Module 3 Knowledge & Application Assessment (KAA)	Est. TOT 3.0 Hr.	Min. of 80%
Lab Exercise	IND220 Lab 3.1 AS Single-acting Cylinder Circuit.pdf (Automation Studio files included in Sakai)	Est. TOT 1.5 Hr.	
Lab Exercise	IND220 Lab 3.2 AS Troubleshooting Faults in a Pneumatic Circuit.pdf (Automation Studio files included in Sakai)	Est. TOT 2.0 Hr.	
Lab Exercise	IND220 Lab 3.3 AS Single-acting Cylinder Circuit with Electrical Controls.pdf (Automation Studio files included in Sakai)	Est. TOT 1.5 Hr.	
Hands-On Assessment	Hands-On Assessment for Module 3	Est. TOT 1.0 Hr.	Min. of 100%
TOTAL		Approx. 19 Hrs	18-20 hrs. per week