Multi-State Advanced Manufacturing Consortium

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MSAMC Master Performance Based Objectives (PBO) Review Template

Instructions

The following tab lists PBOs for the topic area ***Integrated Systems*** . Please review each of the PBOs, and rate each PBO with one of the following ratings:

1 = Skill or understanding is required for employees.
2 = Skill is useful, but is not crucial for employees.
3 = Skill is not useful for employees, or isn't relevant for typical work assignments.
0 = PBO is unclear.

Additionally, for each PBO, note any comments or recommendations that you may have about how to improve the PBO. If any PBOs or skill sets seem to be missing from the list, please add them in the space at the bottom of the list.

Please enter your information below	
Name:	
Company/Plant:	
Department/Division:	
Industry/Segment:	
Email:	
Phone:	

Integrated Systems

M-S AMC Industry Partner PBO Review

Please review the following PBOs to identify the appropriate skill set for a given job title / category / classification (see row 10 below).

* In the "**Importance**" column, identify how important each PBO is for someone in the relevant position. For each PBO, type 1 if the PBO must be covered in the coursework, enter 2 if the PBO is helpful but not necessary and would not impair the performance of the employee in the workplace if missed, and enter 3 if the PBO would not benefit the student or doesn't apply to the typical work assignments. If you don't understand the PBO, enter 0.

* Note any comments or feedback for improving each PBO (in the "Comments" column).

Note: It is the intention of competency based instruction to have each student individually demonstrate their proficiency of the skills indicated.

Reviewing PBOs fc ***TYPE JOB TITLE HERE*** (from whose perspective are you rating PBO importance?)

Sub-Topic	Level	Topic	PBO ID	Performance Based Objective (PBO)	Importance 1 = Need 2 = nice to have 3 = N/A 0= Don't understand	Comments *Notes to improve the PBO, PBO is unclear, etc.*
	1	ISYS	1	Identify, by physical examination, the sequence of operations of each station of the integrated system.		
	1	ISYS	2	Identify the type of technology associated with each action on the integrated systems trainer. (e.g. electrical, pneumatic, etc.)		
	1	ISYS	3	Identify each output associated with every step in the sequence of operation on each station on the integrated systems trainer.		
	1	ISYS	4	Generate a list of most probable triggering elements associated with each step in the sequence on each station on the integrated systems trainer.		
	1	ISYS	14	Given a selected part on the drawings (prints), locate the part on the integrated system.		
	1	ISYS	15	Given a part on the integrated system, locate the part on the drawings (prints).		
	1	ISYS	5	Compare the PLC inputs and outputs associated with each real world input and output with the working drawings of the integrated systems trainer.		
	1	ISYS	6	Generate a Sequence diagram of each station on the trainer reflecting: The step, timing, output actuating, and most probable triggers causing the action.		
	1	ISYS	7	Given the Status of an operator's complaint, all I/O indicators (including blown fuse indicators) and the processor logic, identify a faulted part. Given a copy of the logic as it would appear on a programming terminal, and a drawing depicting the physical layout of the machine with all indicators reflecting the state of the machine and processor status indications.		
	1	ISYS	8	Given the Status of an operator's complaint, all I/O Indicators and a sequence Diagram with outputs and triggers identified, Identify the most likely faulted Item(s). Given a drawing depicting the physical layout of the machine with all indicators reflecting the state of the machine and processor status indications.		

	1	ISYS	9	Isolate a fault on the integrated system trainer as to the input that is expected/output that is expected for the paused sequence of operation.		
	1	ISYS	10	Use the internet to supplement their understanding with unfamiliar technology as it relates to components on the integrated system trainer.		
	1	ISYS	11	Generate a flow chart (or List of actions) that reflect the troubleshooting logic used on sequencing machines.		
	1	ISYS	12	List the part flow and process flow of the integrated systems trainer.		
	1	ISYS	13	Match the following LANS with an example of their function: - Robot and Tooling LAN – Local I/O and Remote I/O (includes names of DeviceNet and ProfiBus) - PLC to PLC LAN - Program Back-up–and- Data Collection LAN - F.I.S. LAN (Factory Information Systems) - Work Scheduling LAN (includes Just in time, etc.)		
	1	ISYS	16	Generate a flow chart of a standardized procedure for troubleshooting sequencing machines.		

Additions: Please add any additional objectives that we may have overlooked.

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