

## CURRICULUM AUDIT OF ALIGNMENT OF INTENDED PROGRAM LEARNING OUTCOMES WITH INDIVIDUAL COURSE OUTCOMES

COURSE#	PROGRAM OUTCOME # 4 <i>System Development</i> - develop Human Machine Interface - develop database and reporting - develop control configuration / programming - implement data transfer methodology - implement security methodology - establish compliance with functional requirements - test the automation systems - assemble user documentation and manuals	PROGRAM OUTCOME # 5 <i>System Deployment</i> - receipt verification of all devices - perform physical inspection installed equipment - load configuration and programs to devices - solve unforeseen installation problems - test configuration and programming - test communication systems and field devices - test all safety elements and systems - test all security features - provide initial training for facility personnel - execute system-level tests - troubleshoot problems identified during testing - make necessary adjustments to demonstrate performance	PROGRAM OUTCOME # 6 <i>System Operation &amp; Maintenance</i> - verify system performance, records and compliance - provide technical support for facility personnel - perform training needs analysis - provide training for facility personnel - monitor performance using diagnostic tools - perform periodic system performance - perform continuous improvement - document lessons learned - maintain licenses, updates, and service contracts - determine spare parts needs - plan for preventive maintenance, backups and recovery plans - implementation change management plan
ECT 165 DC Circuits & Design	X	X	X
ECT167 AC Circuits & Design	X	X	X
ECT170 Intro to IT	X	X	X
ECT231 Digital Comp Design	X	X	X
ECT280 Intro to Auto Mfg Systems	X	X	X
ECT281 Robotic Controls			
ECT381 Robotic Control Systems			
ECT444 PLCs & Control Sys	X	X	X

ECT480 Appl. Robotic, Automation Systems			
MET103 Intro to Tech Graph w/CAD			
MET203 Intro to Solid Modeling			
MET299 CAD Fundamentals			
MET329 Fluid Power Technology			
MET407 Tool and Die Design			
MFG225 Manufacturing Materials			
MFG370 Fund of Mach Tools			
MFG371 Mfg. Process & Materials			
MFG372 Plastics Technology			
MFG376 CNC Systems			
TMGT131 Intro to Manufacturing			
TMGT478 Ind. Org & Function			
TMGT492 Industrial Supervision			

**Note:** For each course or other learning experience, indicate whether the outcome is intended to be met at a basic, intermediate, or advanced level.

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