

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

COURSE#	PROGRAM OUTCOME # 1 <i>System Feasibility</i> - define preliminary project scope - determine automation requirements - develop automation strategy - conduct technical studies to define development needs and risks - perform justification analysis - create summary document to facilitate decision making	PROGRAM OUTCOME # 2 <i>System Definition</i> - determine, document and communicate operational strategies and design requirements - analyze possible technical solutions in order to define best automation strategies - establish detailed requirements to form the basis for system designs through hardware and software system architectures, equipment data sheets, safety policies and vendor recommendations - generate a project cost estimate - create a basis-of-design document to summarize project requirements.	PROGRAM OUTCOME # 3 <i>System Design</i> - perform safety analysis and identify compliance to standards and regulations - establish templates and guidelines to satisfy customer design criteria - create detailed equipment specifications and data sheets - define data structures and flow models - select the physical communication media, network architectures and protocols - develop functional specifications development and programming - design a test plan - perform detailed design drawings, installation details and purchase requisitions - prepare construction work packages
ECT 165 DC Circuits & Design			
ECT167 AC Circuits & Design			
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	X	X	X
ECT381 Robotic Control Systems	X	X	X
ECT444 PLCs & Control Sys ECT480	X	X	X

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.

Prepared by: Elliot Robins, Ph.D., Assessment and Accreditation Coordinator, Indiana State University
October 18, 2007