

EMERGING TECHNOLOGIES

FLCC Victor Campus Center	Specialized Manufacturing Co.								Automation Control Co.					Test Systems			Telcom		Energy Systems Co.						
Hands-on Curriculum Emerging Technologies <i>Associate in Applied Science</i> <i>(AAS) Degree in</i> Instrumentation and Control Technologies <i>samantpg@flcc.edu</i>	G.W.Lisk (Manufacturing)	IIEC Electronics	Surmotech (Electronics)	Zeller Electric	FSI Systems (Electronics)	Optimax (Optics)	New Scale Tech (Micromotors)	Biotechnology	Kirtas (Book Scanner)	Gorbel (Intelligent Crane)	Unique Automation	Pliant	Johnson Control	ITT (Gould), ITT (Space)	View Point Systems	Infotonics MEMS	Cornell Tech Farm	Redcom Laboratories	L-3 Com	Green (Wind, Solar, Fuel cell)	Nuclear	Hybrid	Smart Electrical Grid	Transportation Technologies	
	Tools/Skills																								
	Critical	◆																							
	Very Important	❖																							
Important	◆																								
Communication/ProblemSolving/Teamwork	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mathematics/Computation/CAD	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Sensors & Actuators	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Vibration & Sound	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Datalogging & Analysis	❖	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Innovative Design & Simulation	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Process Improvement/ Lean Six-Sigma	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Microcontroller	❖	❖	❖	◆	◆	❖	◆	❖	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Programmable Logic Ctrl	◆	❖	❖	◆	❖	❖	❖	❖	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Program. Automation Ctrl / FPGA	❖	❖	❖	◆	❖	❖	❖	❖	❖	❖	❖	❖	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Motion Control	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Machine Vision	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Robotics	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Remote Monitoring	❖	❖	❖	❖	❖	❖	❖	❖	❖	❖	❖	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Infrastructure Monitoring	❖	❖	❖	◆	◆	◆	◆	❖	❖	❖	❖	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Industry Matrix (Y = Yes)																									
Contract Manufacturing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Medical Technology	Y	Y	Y	Y	Y	Y	Y	Y		Y		Y	Y		Y	Y									
Defense Industries	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y
Consumer Product Design & Development	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y			Y		Y	Y	Y	Y