Robotics & Mechatronics		*Course to Program Map*						F22
Program Outcomes: Upon completion of the program, graduates will be able to…	**Institutional Skills**	**Install, configure, and troubleshoot automation technology including but not limited to robots, actuators, sensors, and logic controllers**	**Implement computer logic and code to program hardware and software to achieve automation tasks**	**Follow safety practices and perform risk assessment on robotics and automation technology**	**Asses the requirements, constraints, and goals of a project or job in order to develop effective solutions**	**Communicate technical information and solutions effectively both verbally and in writing.**	**Formulate solutions to ill-defined problems using technology**	
Courses								
Course # and Title		IRMA mapping						
INPR 114 OSHA 10	W			I				
CSCI 102 Introduction to Programming	CP		I			I	I	
ROBT 110 Design Thinking in STEM	CPW	I		I	I	I	I	
ROBT 100 Basic Electronics	CP	IR	I	IR	IR	IR	IR	
ROBT 120 Introduction to Robotics and Embedded Systems	CPW	R	I	R	I	I	I	
CSCI 140 Overview of computer Science	CP		R			R	R	
INPR 131 Shop Operations	W			I				
INPR 160 Fluid Power 1	PW	R		R	I	I		
INPR 190 Industrial PLC's	CPW	R	I	R	R		R	
ROBT 130 Industrial Robotics Fundementals	CP	R		R	R		R	
CSCI 150 CompTIA Network+	CP		R		R	R	R	
INPR 231 Motor Controls	PW	R		R		R		
INPR 185 Industrial Wiring	PW	R		MA	R			
ROBT 200 Mobile Robots and vision	CP	MA	R	R	R	R	R	
CSCI 107 Advanced Programming	CP		MA			R	R	
CSCI 230 Security +	CP		R		R	R		

Mapping	
I	Introduced
R	Reinforced
M	Mastered
A	Assessed/Artifact

Essential Skills	
1	written communication
2	oral communication
3	critical thinking
4	cultural diversity
5	social responsibility

Employability Skills	
C	communication
P	problem solving
W	work ethic