



Manufacturing and Technology

**Program Option: Automotive - Automated Manufacturing Tech.
Certificate and AAS Degree Option - C230
Automated/Robotics Maintenance/Engineering Technician Careers**



			Semester Hours				Credentials
Course	Title	Prerequisites	Awd	Lec	Lab	Total	
Diploma Awarded: Certificate (CER) - the following classes.			Total Hours =			28	
AUT 102	Lean Manufacturing & Industrial Safety		CER	3		3	
AUT 104	Blueprint Reading for Manufacturing		CER	3		3	
AUT 116	Introduction to Robotics		CER	2	2	3	
AUT 186	Principles of Welding & Metal Cutting Techniques		CER	1	4	3	NCEER Welding, Level I, Modules 101 - 112
CIS 146	Microcomputer Applications		CER	3		3	
ELM 200	Electric Circuits I (DC Electricity)	eligible for MTH 100	CER	2	2	3	Electronics Technician Association, EM1
ENG 101	English Composition I	Placement	CER	3		3	
MTH 100	Intermediate College Algebra	Placement	CER	3		3	
PHY 115	Technical Physics	MTH 100	CER	3	2	4	
Diploma Awarded: Advanced Certificate (ACER) - add the following classes to those listed above.			Total Hours =			37	
AHUM EL	Humanities & Fine Arts Elective (recommend PHL 206)		ACER	3		3	
AUT 130	Fundamentals Industrial Hydraulics & Pneumatics		ACER	2	2	3	
ELM 201S	Electric Circuits II (AC Electricity)	ELM 200	ACER	2	2	3	Electronics Technician Association, EM2
Diploma Awarded: Associate in Applied Science (AAS) - add the following classes to those listed above.			Total Hours =			65	
ASOC EL	Soc. & Behav. Sci. Elective (recommend PSY 200 or SOC 200)		AAS	3		3	
ATM 211	Programmable Logic Controllers I	ELM 215	AAS	2	2	3	
ATM 212	Programmable Logic Controllers II	ATM 211	AAS	2	2	3	
ATM 220	Advanced Motor Controls	ELM 215	AAS	1	4	3	
AUT 208	Automated System Diagnosis & Troubleshooting	ELM 215 & ATM 211	AAS	2	2	3	
AUT 213	Robotics Project (Fanuc Welding Cell)	AUT 116 & AUT 186	AAS	1	4	3	
ELM 215	Industrial Controls I	ELM 201S	AAS	2	4	4	
SPH 107	Fundamentals of Public Speaking		AAS	3		3	
ATM, AUT, ELM, MET	Required AAS Option Elective, choose one course to meet the total credit hours for the chosen Option: AUT 293 (3 Credits) - Automated Cooperative Education, or AUT 262 (3 Credits) - Computer Integrated Manufacturing, or MET 201 (3 Credits) - Basic Computer Aided Drafting, or MET 220 (3 Credits) - Mechanical Systems I		AAS			3	