



**Program Option: Manufacturing Systems Technology
Certificate and AAS Degree Option - C240
Manufacturing Production Careers**

Manufacturing and Technology

Course	Title	Prerequisites	Semester Hours				Credentials
			Awd	Lec	Lab	Total	
Diploma Awarded: Certificate (CER) - after completion of the following classes.			Total Hours =	28			
ADM 106	Quality Control Concepts		CER	2	2	3	
AUT 102	Lean Manufacturing and Industrial Safety (Mfg. Fundamentals)		CER	3		3	OHSA 10 Hr.
AUT 104	Blueprint Reading for Manufacturing		CER	3		3	
AUT 116	Introduction to Robotics		CER	2	2	3	
AUT 130	Fundamentals Industrial Hydraulics & Pneumatics		CER	2	2	3	
AUT 144	Manufacturing Systems, Methods, and Processes		CER	3		3	
MET 190	Mechanical Tools I		CER	2	4	4	
MET 233	Materials		CER	3		3	
MET 237	Automated Inspection Principles (Introduces CMM & Vision Inspection Systems)		CER	2	2	3	
Diploma Awarded: Advanced Certificate (ACER) - add the following classes to those listed above.			Total Hours =	40			
AHUM EL	Humanities & Fine Arts Elective (recommend PHL 206)		ACER	3		3	
CIS 146	Microcomputer Applications		ACER	3		3	
ENG 101	English Composition I	Placement Score	ACER	3		3	
MTH 100	Intermediate College Algebra	Placement Score	ACER	3		3	
Diploma Awarded: Associate in Applied Science (AAS) - add the following classes to those listed above.			Total Hours =	69		or 70	
ASOC EL	Soc. & Behavr. Sci. Elective (recommend PSY 200 or SOC 200)		AAS	3		3	
IET 114	Basic Electricity		AAS	2	2	3	
MET 191	Mechanical Tools II (introduces CNC)	MET 190	AAS	2	4	4	
MET 201	Basic Computer Aided Drafting & Design (AutoCAD)	AUT 104	AAS	1	4	3	
MET 220	Mechanical Systems I		AAS	2	2	3	
MST 111	Elements of Supervision		AAS	3		3	
PHY 115	Technical Physics	MTH 100	AAS	3	2	4	
SPH 107 or 106	Fundamentals of Public Speaking or Oral Comm. <i>Recmd SPH 107</i>		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 MET 204 (3 Credits) - Basic Computer Aided Modeling (Inventor), or ELM 215 (4 Credits) - Industrial Controls, or AUT 186 (3 Credits) - Principles of Welding and Metal Cutting		AAS			3 or 4	