



Manufacturing and Technology


**NEW !!!**

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

**Begins Fall 2016 Semester**

11/1/2016



				Semester Hours				
Course	Title	Prerequisites	Awd	Lec	Lab	Total	Credentials	
Diploma Awarded: Certificate (CER) - after completion of the following classes.			Total Hours =			28		
ADM 106	Quality Control Concepts		CER	2	2	3	MSSC (see below)	
AUT 102	Lean Manufacturing and Industrial Safety (Mfg. Fundamentals)		CER	3		3	OHSa 10 Hr. & MSSC (see below)	
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	MSSC (see below)	
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	MSSC (see below)	
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		
Manufacturing Skills Council's (MSSC) Certified Production Technician (CPT)				<div>The CPT Certification is a <b>required</b> part of JSSC's Manufacturing Systems Technology curriculum. The goal of the industry-wide recognized CPT certification is to raise the level of performance of professional production workers both to assist the individuals in finding higher-wage jobs and to help employers ensure their workforce increases the company's productivity and competitiveness. Students passing respective MSSC exams will receive a certificate for each of four functional manufacturing areas and upon passing all four exams will receive the CPT</div>				
MSSC CPT Credential Module	JSCC Course	JSCC Course Title	MSSC Course Online Curriculum (replaces textbook)					MSSC Exam Fees
Safety	AUT 102	Lean Manufacturing & Industrial Safety	\$130					\$43
Quality Practices & Measurement	ADM 106	Quality Control Concepts	\$130					\$43
Manufacturing Processes & Production	AUT 144	Manufacturing Systems, Methods, & Processes	\$130					\$43
Maintenance Awareness	MET 220	Mechanical Systems	\$130					\$43
One time MSSC Registration Fee			\$60					
Costs are in addition to tuition, books/fees.		Total Costs for MSSC CPT Certification	\$752					