

## 32 Credit Hour Certificate – Advanced Manufacturing Technology

Name: \_\_\_\_\_ ID#: \_\_\_\_\_ Date: \_\_\_\_\_

MACC's certificate in Advanced Manufacturing Technology prepares the student for entry into the general, industrial, manufacturing field. Courses provide skills in basic electrical circuits, electric motor controls, machining, hydraulics, welding, maintenance management, quality control, and production planning. Most courses involve hands-on experience with up-to-date, high-technology equipment found in current manufacturing operations. Upon successful completion of all four Certified Production Technician (CPT) modules, students will receive certification from the [Manufacturing Skills Standards Council \(MSSC\)](#).

Taken	Course	Required Courses	Hours	Milestone*
		Directed Electives	2	
	EET100	DC/AC Electronics – <b>Fall Only</b>	3	
	EET101	^Industrial Electricity – <b>Spring Only</b>	3	
	IND100	Industrial Safety & Manufacturing Processes: CPT1 & CPT3 – <b>Spring Only</b>	3	
	IND101	Fundamentals of Industrial Maintenance: CPT4 – <b>Fall Only</b>	3	
	IND105	Fluid Power Principles – <b>Spring Only</b>	3	
	IND110	Industrial Print Reading: CPT2 – <b>Fall Only</b>	3	
	IND200	^Mechanical Systems – <b>Spring Only</b>	3	
	MSP101	Machine Tool I – <b>Fall Only</b>	3	
	MSP220	CNC Programming and Operations – <b>Spring Only</b>	3	
	WLD101	Welding I	3	
			<b>32</b>	
		<b>Directed Electives (2 credit hours needed)</b>		
	BUS150 <u>or</u> IND120 <u>or</u> LAL101	^Business Communication <u>or</u> ^Technical Report Writing <u>or</u> ^Composition I	3	
	IND295 <u>or</u> SKL250	^Industrial Technology Internship <u>or</u> ^Employment Seminar	1-2	
	MSP102	^Machine Tool II – <b>Fall Only</b>	3	
	MTH130 <u>or</u> MTH140 <u>or</u> MTH142	^Technical Mathematics <u>or</u> ^Precalculus Algebra <u>or</u> ^Quantitative Reasoning	3	
	SKL101	College Orientation	1	
	WLD102	^Welding II	3	
		Minimum Required Hours for Certificate	<b>32</b>	

\*It is strongly recommended that students successfully complete the Milestone courses as planned on the academic map to ensure completion of the certificate in a timely manner. In addition, if students do not successfully complete the Milestone course(s), they are strongly encouraged to re-enroll in the course(s) the following semester.

\*\*Certificate is granted upon successful completion of all required courses plus directed elective courses totaling a minimum of 32 credit hours.

^Please refer to the course descriptions for pre/co-requisite and placement information. You can only register for these courses if you have met the prerequisite, placed into the course and/or enroll in the co-requisite course(s).