

## Associate of Applied Science – Advanced Manufacturing Technology

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

MACC's Associate of Applied Science degree in Engineering Systems – Advanced Manufacturing Technology program 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). This academic map is a suggested semester-by-semester schedule of courses based upon the AAS degree requirements as outlined in the academic catalog.


Taken	Course	Semester	Hours	Milestone**
<b>First Semester (Fall)</b>				
		<u>Directed Elective</u> ***	3	
	EET100	DC/AC Electronics – <b>Fall Only</b>	3	
	IND101	Fundamentals of Industrial Maintenance: CPT4 – <b>Fall Only</b>	3	
	IND110	Industrial Print Reading: CPT2 – <b>Fall Only</b>	3	
	MTH130 <u>or</u> MTH140 <u>or</u> MTH142	^Technical Math* <u>or</u> ^Precalculus Algebra* <u>or</u> ^Quantitative Reasoning *	3	MTH130 <u>or</u> MTH140 <u>or</u> MTH142
	SKL101	College Orientation	1	SKL101
			<b>16</b>	
<b>Second Semester (Spring)</b>				
		<u>Directed Elective</u> ***	3	
	EET101	^Industrial Electricity – <b>Spring Only</b>	3	
	IND100	Industrial Safety & Manufacturing Processes: CPT1 & CPT3 – <b>Spring Only</b>	3	
	IND105	Fluid Power Principles – <b>Spring Only</b>	3	
	IND200	^Mechanical Systems – <b>Spring Only</b>	3	
			<b>15</b>	
<b>Third Semester (Fall)</b>				
		<u>Directed Elective</u> ***	3	
		<u>Directed Elective</u> ***	3	
	BUS150 <u>or</u> IND120 <u>or</u> LAL101	^Business Communication* <u>or</u> ^Technical Report Writing* <u>or</u> ^Composition I*	3	BUS150 <u>or</u> IND120 <u>or</u> LAL101
	EET111	^Electric Motor Controls – <b>Fall Only</b>	3	
	PHY101 <u>or</u> PHY125	^Foundations of Physical Science <u>or</u> ^Foundations of Physics	4	
			<b>16</b>	
<b>Fourth Semester (Spring)</b>				
		<u>Directed Elective</u> ***	3	
	HST105 <u>or</u> HST106 <u>or</u> PSC105	American History to 1865 <u>or</u> American History from 1865 <u>or</u> Introduction to American Government	3	
		<u>Humanities</u> ****	3	
	SKL250 <u>or</u> IND295	^Employment Seminar <u>or</u> ^Industrial Technology Internship	1-2	
	SPK101	Public Speaking	3	
			<b>13-14</b>	
Minimum Required Hours for Degree			<b>60</b>	

**\*All fundamental math and English courses (e.g. MTH015) must be completed during the first semester. Required math and English courses must be completed immediately following the completion of fundamentals coursework or as listed on the degree map. Enrollment in fundamentals courses may delay completion of the degree. Fundamentals Courses are not included in the total credit hours required for the degree.**

**\*\*It is strongly recommended that students successfully complete the Milestone courses as planned on the academic map to ensure completion of the degree in two years. 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.**

**\*\*\*Directed Elective Options (complete 5 courses):**

AMT112 Computer-Aided Design I  
AMT211 Computer-Aided Design II (Fall Only)  
MSP101 Machine Tool I (Fall Only)  
MSP102 Machine Tool II (Fall Only)  
MSP220 CNC Programming and Operations (Spring Only)  
WLD101 Welding I  
WLD102 Welding II

**\*\*\*\*  Core 42 approved humanities courses are located on the course description web pages for Art, Drama, Foreign Language, History, Language and Literature, Music, and Philosophy.**

**^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).**

#### **Additional Graduation Requirement**

Missouri law, included in Senate Bill 807, requires every college student pursuing an associate's or bachelor's degree at a public institution to pass the Missouri Higher Education Civics Achievement Examination with at least a 70 percent to graduate. The rule will apply to the incoming class of first-time college students in the fall of 2019 and all students thereafter.