

Associate Applied Science – Advanced Manufacturing Technology (3D Design & Printing Focus)

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**
First Semester (Fall)				
	EET100	DC/AC Electronics – Fall Only	3	
	IND101	Fundamentals of Industrial Maintenance: CPT4 – Fall Only	3	
	IND110	Industrial Print Reading: CPT2 – Fall Only	3	
	MSP101	Machine Tool I – Fall Only	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
			16	
Second Semester (Spring)				
	AMT112	Computer-Aided Design I	3	
	EET101	^Industrial Electricity – Spring Only	3	
	IND100	Industrial Safety & Manufacturing Processes: CPT1 & CPT3 – Spring Only	3	
	IND105	Fluid Power Principles – Spring Only	3	
	IND200	^Mechanical Systems – Spring Only	3	
			15	
Third Semester (Fall)				
	AMT211	Computer-Aided Design II – Fall Only	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
	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	
	PHY101 <u>or</u> PHY125	^Foundations of Physical Science <u>or</u> ^Foundations of Physics	4	
	WLD101	Welding I	3	
			16	
Fourth Semester (Spring)				
	AMT250	Applied 3D Design & Printing – Spring Only	3	
		Humanities***	3	
	MSP220	CNC Programming and Operations – Spring Only	3	
	SKL250 <u>or</u> IND295	^Employment Seminar <u>or</u> ^Industrial Technology Internship	1-2	
	SPK101	Public Speaking	3	
			13-14	
Minimum Required Hours for Degree			60	

*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.



*** 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.