

Associate of Applied Science – Mechatronics

Name: _____ ID#: _____ Date: _____

MACC's Associate of Applied Science degree in Mechatronics prepares students to be electrical and mechanical technicians who can troubleshoot, maintain, and repair mechanical equipment for today's highly integrated and automated manufacturing facilities. Courses include intensive hands-on lab components and are designed to create a cross-trained technician with skills in electrical systems, motor control, hydraulics and pneumatics, programmable logic controllers, safety, and quality control. 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)		
	AMT112	Computer-Aided Design I – Fall Only	3	
	BUS150 <u>or</u> LAL101	^Business Communication* <u>or</u> ^Composition I*	3	BUS150 <u>or</u> LAL101
	EET100	DC/AC Electronics – Fall Only	3	
	IND101	Fundamentals of Industrial Maintenance – Fall Only	3	
	MTH140 <u>or</u> MTH142	^College Algebra* <u>or</u> ^Quantitative Reasoning*	3	MTH140 <u>or</u> MTH142
	SKL101	College Orientation	1	SKL101
			16	
		Second Semester (Spring)		
	EET110	^Digital Electronics & Control – Spring Only	3	
	EET118	^Industrial Electricity & Motor Control – Spring Only	3	
	IND100	Industrial Safety & Manufacturing Processes – Spring Only	3	
	IND105	Fluid Power Principles – Spring Only	3	
	IND200	^Mechanical Systems – Spring Only	3	
			15	
		Third Semester (Fall)		
	EET213	^Process Control and Instrumentation – Fall Only	3	
	EET214	^Programmable Logic Controls – Fall Only	3	
	EET220	^Industrial Robotics – Fall Only	3	
	PHY101 <u>or</u> PHY125	^Foundations of Physical Science <u>or</u> ^Foundations of Physics	4	
			13	
		Fourth Semester (Spring)		
	EET216	^Advanced Mechatronics – Spring Only	3	
	EET218	^Human Machine Interfaces – Spring Only	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	
		Humanities***	3	
	SKL250 <u>or</u> IND295	^Employment Seminar <u>or</u> ^Industrial Technology Internship	1-2	
	SPK101 <u>or</u> SPK120	Public Speaking <u>or</u> Interpersonal Communication	3	
			16-17	
		Minimum Required Hours for Degree	60	

***All fundamental math and English courses (e.g., MTH010) 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.