

MOBERLY AREA COMMUNITY COLLEGE

Associate Applied Science – Engineering Systems (Mechatronics Option)

Name: _____ ID#: _____ Date: _____

MACC's Associate of Applied Science degree in Engineering Systems – 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)				
	AMD110	Industrial Print Reading: CPT2	3	
	EET100	DC/AC Electronics	3	
	IND103	Industrial Safety & Health: CPT1	3	
	IND200	Mechanical Systems	3	
	MTH130 <u>or</u> MTH140	^Technical Math** <u>or</u> ^Precalculus Algebra**	3	MTH130 <u>or</u> MTH140
	SKL101	College Orientation	1	SKL101
			16	
Second Semester (Spring)				
	EET101	^Industrial Electricity	3	
	EET110	^Digital Electronics & Control	3	
	IND100	Introduction to Manufacturing: CPT3	3	
	IND101	Fundamentals of Industrial Maintenance: CPT4	3	
	IND105	Fluid Power Principles	3	
	SPK101	Public Speaking	3	
			18	
Third Semester (Fall)				
	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
	CIT101	Computer Essentials	3	
	EET111	^Electric Motor Controls	3	
	EET214	^Programmable Logic Controls	3	
	PHY125	^Foundations of Physics	5	
			17	
Fourth Semester (Spring)				
	EET213	^Process Control and Instrumentation	3	
	EET216	^Advanced PLCs	3	
	EET220	^Robotics & Integrated Manufacturing	3	
	HST105 <u>or</u> HST106 <u>or</u> PSC105	American History to 1865 <u>or</u> American History from 1865 <u>or</u> Functions & Policies of American Government	3	
		<u>Humanities</u>	3	
	SKL250 <u>or</u> IND295	^Employment Seminar <u>or</u> ^Industrial Technology Internship	1-2	
			16-17	
Total Hours for Degree			67-68**	

**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.**

^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).