

Electromechanical Engineering Technology Checksheet

Name: _____
 Student ID#: _____

Revised: _____
 Catalog Date: _____

Common First Year (CFY)	Term(s)	Course #	Course Title	Hrs	Prerequisites
		Total: 14			
Fall		ENGR 1300	Exploring Eng. and Tech.*	2	
		ENGR 1301	Foundations of Math & Sci.*	3	
		MATH #1	Precalculus* or Calculus I*	3	ML3 or MATH1100 or MATH1101
		XXXX 1501	Global Theme (Social Science)	3	
		XXXX 1511	Local Theme (Social Science)	3	
Spring		ENGR 1302	Logic and Comp. Prob. Solving*	3	
		ENGR 1303	Eng. Vis. and Graphical Com.*	3	
		MATH #2	Calculus I* or Calculus II	3	MATH 1103*
		PHYS 2101	Physics I	3	<i>MATH 1241</i>
		PHYS 2101L	Physics I Lab	1	<i>PHYS 2101</i>
		WRDS 1103	Writing & Inquiry	3	
Total: 16					

Second Year	Term(s)	Course #	Course Title	Hrs	Prerequisites
		Total: 14			
Fall		ETEM 2101	Circuit Fundamentals	3	MATH 1103*
		ETEM 2161	Foundations of Mechanics	3	PHYS 2101 and ENGR 1301*
		ETEM 2171	Algorithms and Programming	3	ENGR 1302*
		ETEM 2181	Circuits and Machines in Action	2	<i>ETEM 2101</i> and <i>ETEM 2161</i> and ENGR 1300*
		ETME 2111	CAD Fundamentals	3	ENGR 1303*
Spring		ETEM 2271	Digital Fundamentals	3	
		ETEM 2281	Doing and Making	3	ETEM 2171 and ETEM 2181 and <i>ETME 2111</i>
		ETEM 2291	Practical System Design	3	
		MATH #3	Calculus II	3	MATH 1241*
		Natural Science		3	
Total: 15					

Third Year	Term(s)	Course #	Course Title	Hrs	Prerequisites
		Total: 16			
Fall		ETEM 3101	Principles of Control	3	ETEM 2101 and <i>ETEM 2161</i> and <i>MATH 1241</i>
		ETEM 3131	Electromechanical Devices	3	
		ETEM 3171	Digital Devices	3	ETEM 2171 and ETEM 2271
		ETEM 3181	Exploring Devices	1	<i>ETEM 3131</i> and <i>ETEM 3171</i> and ETEM 2181
		ETEM 4141	Digital Manufacturing Methods	3	
		CTCM 2530	Critical Thinking and Communication	3	WRDS 1103 or WRDS 1104
Spring		ETEM 3191	From Concept to Product	3	
		ETEM 3231	Power, Machines, and Energy	3	ETEM 2101
		ETEM 3261	Applied Control Systems	3	ETEM 3101
		ETEM 4161	Elements of Automation	3	
		XXXX 1502	Glocal Theme (Arts / Humanities)	3	
Total: 15					

Fourth Year	Term(s)	Course #	Course Title	Hrs	Prerequisites
		Total: 15			
Fall		ETEM 3281	More Doing and Making	3	<i>ETEM 3181</i> , <i>ETEM 3261</i> , and <i>ETME 2111</i>
		ETEM 4100	Electromechanical Capstone Design I	2	ETEM 3191
		ETEM 4131	Intelligent Industrial Systems	3	ETEM 3231 and ETEM 4161
		ETGR 3295	Multidisc. Professional Development	1	Junior or Senior standing
		Restricted Elective		3	
		Restricted Elective		3	
Spring		ETEM 4200	Electromechanical Capstone Design II	2	ETEM 4100
		ETEM 4261	Robotics and Cyber-Physical Systems	3	ETEM 3181 and <i>ETEM 3261</i>
		ETEM 4600	Technology Seminar	1	Senior Standing
		Restricted Elective		3	
		Restricted Elective		3	
		XXXX 1575	American Democracy	3	
Total: 15					

* = grade of C or better is required for degree progression
 Courses in *italics* can be taken as a pre **or** co-requisite
 Courses with a are critical to take in the listed semester

