

Mechanical Engineering Checksheet

Name: _____
 Student ID#: _____

	Term(s)	Course #	Course Title	Hrs		Prerequisites	
Common First Year (CFY)	Fall	ENGR 1300	Exploring Engineering and Technology*	2	Only 2 attempts allowed		
		ENGR 1301	Foundations of Math & Science for Engineering*	3	Only 2 attempts allowed		
		MATH 1241	Calculus*	3	Only 2 attempts allowed	Math Placement Level 4/MATH 1103	
		XXXX 15xx	Gen Ed Requirement (Theme 1501, 1502, 1511/1512 Find Amer Demo 1575)	3		https://ugs.charlotte.edu/charlotte-core/general-education-curriculum/	
		XXXX 15xx	Gen Ed Requirement (Theme 1501, 1502, 1511/1512 Find Amer Demo 1575)	3		https://ugs.charlotte.edu/charlotte-core/general-education-curriculum/	
	Total: 14						
	Spring	ENGR 1302	Logic and Computational Problem Solving*	3	Only 2 attempts allowed		
		ENGR 1303	Engr Visual & Graphical Communication*	3	Only 2 attempts allowed		
		MATH 1242	Calculus II*	3	Only 2 attempts allowed	MATH 1241	
		PHYS 2101	Physics I*	3	Only 2 attempts allowed	MATH 1241, PHYS 2101L	
PHYS 2101L		Physics I Lab*	1	Only 2 attempts allowed	PHYS 2101		
WRDS 1103/1104		Writing & Inquiry in Academic Contexts*	3		Note: WRDS 1104 is 4 credit hours		
Total: 16							
Second Year	Fall	MATH 2171	Differential Equations*	3	Only 2 attempts allowed	MATH 1242 w/grade of C or higher	
		MEGR 2141	Eng Mechanics I (Statics)*	3	Only 2 attempts allowed	PHYS 2101 & MATH 1242 w/grade of C or higher	
		MEGR 2152	CAD for Mechanical Engineers*	1	Only 2 attempts allowed	ENGR 1303 w/grade of C or higher	
		MEGR 2233	Math & Science for Engineering II*	3	Only 2 attempts allowed	ENGR 1301 & MATH 1241 w/grade of C or higher	
		PHYS 2102	Physics II*	3	Only 2 attempts allowed	PHYS 2101 w/grade of C or higher & MATH 1242	
		PHYS 2102L	Physics II Lab*	1	Only 2 attempts allowed	PHYS 2101L & PHYS 2102	
		Total: 14					
	Spring	MEGR 2180	Manufacturing Systems*	3	Only 2 attempts allowed	MEGR 2141 w/grade of C or higher MEGR 2157	
		MEGR 2157	Design Projects I Lab*	3	Only 2 attempts allowed	ENGR 1300, MEGR 2141, MEGR 2152 all w/grade of C or higher MEGR 2180	
		MEGR 2144	Solid Mechanics*	3	Only 2 attempts allowed	MEGR 2141 w/grade of C or higher	
		MATH 2241	Calculus III*	3	Only 2 attempts allowed	MATH 1242	
		MEGR 2173	Mechatronics I*	2	Only 2 attempts allowed	ENGR 1302, PHYS 2102 both w/grade of C or higher MEGR 2174	
		MEGR 2174	Mechatronics I Projects Lab*	1	Only 2 attempts allowed	PHYS 2102L w/grade of C or higher MEGR 2173	
		Total: 15					
		Third Year	Fall	MEGR 3111	Thermodynamics I*	3	Only 2 attempts allowed
MEGR 3121	Dynamics Systems I*			3	Only 2 attempts allowed	MEGR 2141 & MATH 1242 w/grade of C or higher	
MEGR 3173	Mechatronics II*			2	Only 2 attempts allowed	MEGR 2173 w/grade of C or higher MEGR 3174	
MEGR 3174	Mechatronics II Projects Lab*			1	Only 2 attempts allowed	MEGR 2174 w/grade of C or higher MEGR 3173	
MEGR 2242	Computational Methods for Engineers*			2	Only 2 attempts allowed	MEGR 2233 w/grade of C or higher	
MEGR 2234	Math & Science for Engineering III*			4	Only 2 attempts allowed	MEGR 2233 & MATH 2171 w/grade of C or higher	
Total: 15							
Spring	MEGR 3161		Introduction to Engineering Materials*	3	Only 2 attempts allowed	MEGR 2144 & MEGR 2233 or CHEM 1251 both w/grade of C or higher	
	MEGR 3156		Design Projects II Lab*	2	Only 2 attempts allowed	MEGR 2144, MEGR 2157, MEGR 2173, MEGR 2174, MEGR 2180 all w/grade of C or higher	
	MEGR 3114		Fluid Mechanics	3	Only 2 attempts allowed	MEGR 3121 & MATH 2241 both w/grade of C or higher	
	MEGR 3152		Mechanics and Materials Lab	2	Only 2 attempts allowed	MEGR 2144 & MEGR 3174 both w/grade of C or higher MEGR 3161	
	MEGR 3123		Dynamic Systems II	3	Only 2 attempts allowed	MEGR 3121, MEGR 2234, & MEGR 2244 all w/grade of C or higher	
	MEGR 3116		Introduction to Heat Transfer	3	Only 2 attempts allowed	MATH 2171 & MEGR 3111 both w/grade of C or higher MEGR 3114	
Total: 16							
Fourth Year	Fall	MEGR 3255	Senior Design I	2	Only 2 attempts allowed	MEGR 3111, MEGR 3114, MEGR 3161, MEGR 3171L or MEGR 3174, and MEGR 3156 all w/grade of C or higher MEGR 3152 & MEGR 3251	
		MEGR 3251	Thermal/Fluids Lab	2	Only 2 attempts allowed	MEGR 3111, MEGR 3174, & MEGR 3114 all w/grade of C or higher	
		MEGR 3221	Machine Analysis & Design I	3	Only 2 attempts allowed	MEGR 2144 & MEGR 3121 both w/grade of C or higher	
		MEGR Technical Elec		3	Only 2 attempts allowed		
		MEGR Technical Elec		3	Only 2 attempts allowed		
		CTCM 2530	Critical Thinking and Comm	3	Only 2 attempts allowed	WRDS 1103/1104 and at least Sophomore Standing	
	Total: 16						
	Spring	MEGR 3256	Senior Design II	3	Only 2 attempts allowed	MEGR 3255	
		MEGR Technical Elec		3	Only 2 attempts allowed	See Degree Works for options	
		MEGR Technical Elec		3	Only 2 attempts allowed	See Degree Works for options	
		ENGR 3295	Professional Development	1	Only 2 attempts allowed	Junior Standing	
		XXXX 15xx	Gen Ed Requirement (Theme 1501, 1502, 1511/1512 Find Amer Demo 1575)	3	Only 2 attempts allowed	https://ugs.charlotte.edu/charlotte-core/general-education-curriculum/	
		XXXX 15xx	Gen Ed Requirement (Theme 1501, 1502, 1511/1512 Find Amer Demo 1575)	3	Only 2 attempts allowed	https://ugs.charlotte.edu/charlotte-core/general-education-curriculum/	
Total: 16							

* = grade of C or better is required for degree progression
 Courses in *italics* can be taken as a pre req co-requisite
 Course in **bold** must be taken as a co-requisite

