

Mechanical Engineering Curriculum 2011 – 2013 Catalog (Purple)

NAME _____ CLID # _____ Advisor _____

Course	Course Name	Cr	Prerequisites (Corequisites)	Sem	Gr	Course	Course Name	Cr	Prerequisites (Corequisites)	Sem	Gr
Fall Semester						Spring Semester					
Freshman											
CHEM 107	Gen Chem I	3	(MATH 140 or higher)			ENGL 102	Composition & Lit	3	ENGL 101 w/C grade		
ENGL 101	Rhet & Comp	3	ACT > 18 or ENGL 90			MATH 301	Calculus II	4	MATH 270 w/C grade		
MATH 270	Calculus I	4	MATH 140 OR HIGHER			MCHE 103	Graph Com & Des	2	MATH 140 OR HIGHER		
MCHE 101	Intro Mech Engr	1	(H/S Alg/Trig OR MATH 140)			PHYS 201	Gen Physics I	4	MATH 270 w/C grade (MATH 301)		
BIOL	Biology Elective	3	Check catalog for each course				Arts Elective	3	Check catalog for each course		
	Total	14					Total	16			
Sophomore											
CHEE 317	Mat of Engr	3	CHEM 107, MATH 270			ENGL 365	Technical Writing	3	15 hrs in major, ENGL 102		
ENGR 211	Statics	3	PHYS 201			ENGR 201	Elect Circuits	3	PHYS 201		
MATH 302	Calculus III	4	MATH 301 w/ C grade			ENGR 313	Dynamics	3	ENGR 211 w/C grade		
PHYS 202	Gen Phys II	4	PHYS 201 (MATH 302)			MATH 350	Differential Eqns	3	MATH 301 w/C grade		
	Lit Elective	3	Check catalog for each course			ENGR 301	Thermodynamics	3	MATH 270, CHEM 107, PHYS 201 OR CHEM 108		
						PHYS 215	Gen Phys Lab	1	PHYS 201		
	Total	17					Total	16			
Junior											
ENGR 203	Mech.s of Mat'ls	3	ENGR 211 w/C or better			ECON 300	Fund of Econ	3	None, (ECON 201 acceptable substitute)		
MCHE 362	Thermal Eng.	3	ENGR 301, (ENGR 304)			MCHE 358	Energy Sys Lab	2	ENGR 304, MCHE 357, MECHE 362		
ENGR 304	Fluid Mechs.	3	ENGR 211, (ENGR 313)			MCHE 365	Mfgr Processes	3	CHEE 317, ENGR 203		
MCHE 301	Engr Analysis	3	MATH 302 (MATH 350)			MCHE 467	Machine Design I	3	ENGR 203, MCHE 103, 363, CHEE 317, (MCHE 365)		
MCHE 357	Instrum/Meas	2	ENGL 365, ENGR 201			MCHE 471	Fluid Mechanics	3	ENGR 301, 304		
MCHE 363	Eng Design	3	ENGR 313, MCHE 103, (MATH 350)			HIST	History Elective	3	Check catalog for each course		
	Total	17					Total	17			
Senior											
MCHE	Tech Elective	3	Upper Division			MCHE	Tech Elective	3	Upper Division		
MCHE 468	Machine Design II	3	MCHE 467			MCHE 474	Control Systems	3	MATH 302, 350, ENGR 313		
MCHE 469	Heat Transfer	3	ENGR 201, 301, 304, MATH 350, MCHE 301			MCHE 484	Eng Projects	3	MCHE 467 (MCHE 468)		
MCHE 478	Finite Elem Anal.	3	MCHE 301, ENGR 203			MCHE 490	Senior Seminar	1	MCHE 467		
MCHE 485	Mech Vibrations	3	MATH 350, MCHE 301, ENGR 313			PHIL 316	Prof Ethics	3	None		
						ECON 430	Ind Econ & Fin	3	Math 301		
	Total	15					Total	16	TOTAL HOURS: 128		

A maximum of one grade of "D" is allowed for all math and engineering courses. All electives must be chosen from the Department of Mechanical Engineering approved list of electives, namely: MCHE 451, 461, 462, 463, 464, 466, 470, 477 and 483. All courses listed in the freshman year must be successfully completed before a student will be permitted to register for any junior year courses in the major. Similarly, all sophomore courses must be completed before taking senior level classes. Students are cautioned to schedule courses in the order listed, and to pay careful attention to prerequisites required. Some courses are offered only once a year. Dropping a required course, or failing to complete a prerequisite course may delay a student's graduation by one or two semesters.