

**MECHANICAL & PREMED ENGINEERING COURSES (MAJOR MEEN)
PROJECTED OFFERINGS**

SPECIFIC PROFESSIONAL SCHOOL COURSE REQUIREMENTS - 46 HOURS

1. A total of 27 credit hours as follows:

<i>Course No.</i>	<i>Course Title</i>	<i>Primary Prerequisites</i>	<i>Stillwater</i>			<i>Tulsa</i>	
			<i>Fa</i>	<i>Sp</i>	<i>Su</i>	<i>Fa</i>	<i>Sp</i>
MAE 3013	MAE ENGR Analysis	MATH 2233, ENSC 2123, ENSC 2613	X	X			X
MAE 3033	Engineering Design	ENGR 1332, ENSC 2123	X	X		X	
MAE 3113	Measurements and Instrumentation	ENSC 2613, ENSC 2123	X	X		X	
MAE 3223	Thermodynamics II	ENSC 2213	X	X			X
MAE 3233	Heat Transfer	ENSC 3233	X	X			X
MAE 3323	Mechanical Design I	ENSC 2113, ENSC 2143	X	X		X	
MAE 3403	Computer Methods in Analysis & Des	ENGR 1412	X	X		X	
MAE 3723	Dynamic Systems	MATH 2233, ENSC 2123, ENSC 2613	X	X			X
IEM 3503	Engineering Economic Analysis	MATH 2153	X	X	X	X	

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2. A total of 13 credit hours from the following 4 categories, selecting one course from each category so that all 4 categories are represented.

+Category I (Thermal Systems Realization)

*MAE 4243	Gas Power Systems	ENSC 3233	X			X
MAE 4263	Vapor Power Systems	MAE 3223, MAE 3233		X		
MAE 4703	Design Indoor Environmental System	MAE 3223, MAE 3233	X			
MAE 4713	Thermal Systems Design	MAE 3223, MAE 3233, ENSC 3233		X		

+Category II (Mechanical Systems Realization)

MAE 4353	Mechanical Design II	MAE 3033, MAE 3323, MAE 3403		X		X
*MAE 4513	Aerospace Structures I	MAE 3323, MAE 3403	X			
MAE 4363	Experimental Methods in Design	MAE 3113, MAE 3323		X		

+Category III (Laboratory)

MAE 4273	Experimental Fluid Dynamics	ENSC 3233, MAE 3113	X			X
MAE 4333	Mechanical Metallurgy	ENSC 3313		X		X
MAE 4733	Mechatronics Design	MAE 3113, MAE 3403	X			

+Category IV (Capstone Design)

MAE 4344	Design Projects	MAE 3033, MAE 3113, MAE 3323	X	X		X
*MAE 4354	Aerospace System Design for MEEN	MAE 3033, MAE 3113, MAE 3323		X		

+MAE ELECTIVES (6 HOURS REQUIRED)

A total of 6 hours to be selected from the following list, or from courses in the 4 Categories listed above, but not used to satisfy that category.

MAE 3123	Manufacturing Processes	ES 2143, ES 3313 or equivalent	X			
*MAE 3253	Appl Aerodynamics & Perform	ES 3233, MATH 2233		X		
*MAE 3293	Compressible Fluid Flow	MATH 2233, ES 3233, ES 2213	X			X
MAE 4053	Automatic Control Systems	MAE 3723 or ECEN 3723	X			X
MAE 4063	Mechanical Vibrations	MAE 3723		X		X
MAE 4313	Adv Proc Engineered Materials	ENSC 3313		X		
MAE 4623	Biomechanics	MATH 2163, ES 2143, MAE 3233		X		

Note: A total of 16 design credit hours are required for graduation.

Science Elective: ASTR 1024 (spring), ASTR 1014 (fall), GEOL 1114, BIOL 1114, CHEM 3053, PHYS 3213, PHYS 3313

***First priority given to BSAE majors. Available to BSME majors on a space-available basis, 1st come – 1st served.
+Elective classes may fill up before your enrollment date. Have a back up plan.**