

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Texas A&M University-Kingsville

Accredited by ABET

FRESHMAN YEAR			
GEEN 1201 Engineering as a Career³	2	MEEN 1320 Elem Num Method & Eng Prob Solving	3
MEEN 1310 Engineering Graphics I	3	ENGL 1302 Rhetoric & Composition	3
ENGL 1301 Rhetoric & Composition	3	<i>(prereq: ENGL 1301)</i>	
CHEM 1311 Gen. Inorganic Chemistry	3	MATH 2414 Calculus II (prereq: MATH 2413)	4
<i>(prereq: MATH 1314, HS chemistry or CHEM 1481)</i>		PHYS 2325 University Physics I	3
CHEM 1111 Gen. Inorganic Chem. Lab	1	<i>(prereq: PHYS 1305/1105 or 1373 or HS eq, coreq: MATH 2413, PHYS 2125)</i>	
<i>(coreq: CHEM 1311)</i>		PHYS 2125 University Physics I Lab	1
MATH 2413 Calculus I	4	<i>(coreq: PHYS 2325)</i>	
<i>(prereq: MATH 1348)</i>		HIST 1301 American History	3
16			17
SOPHOMORE YEAR			
MEEN 2301 Mechanics I, Statics	3	MEEN 2146 Engr. Measurements	1
<i>(prereq: PHYS 2325/2125, coreq: MATH 2414)</i>		<i>(prereq: PHYS 2325/2125)</i>	
POLS 2301 Govt. & Politics of U.S	3	MEEN 2302 Mechanics II, Dynamics	3
MATH 3320 Differential Equations	3	<i>(prereq: MEEN 2301)</i>	
<i>(prereq: MATH 2414)</i>		MEEN 3344 Materials Science	3
PHYS 2326 University Physics II	3	<i>(prereq: CHEM 1311/1111, MATH 2413, coreq: PHYS 2326/2126)</i>	
<i>(prereq: PHYS 2325/2125, coreq: MATH 2414, PHYS 2126)</i>		MEEN 3145 Materials Science Lab	1
PHYS 2126 University Physics II Lab	1	<i>(coreq: MEEN 3344)</i>	
<i>(coreq: PHYS 2326)</i>		CEEN 3311 Mechanics III, Strength of Materials	3
Creative Arts Elective ^^	3	<i>(prereq: CEEN 2301, MATH 2414)</i>	
		Communications¹	3
		MATH 3415 Calculus III (prereq: MATH 2414)	4
16			18
JUNIOR YEAR			
MEEN 3347 Thermodynamics	3	MEEN 3348 Heat Transfer	3
<i>(prereq: MATH 2414, PHYS 2325/2125)</i>		<i>(prereq: MEEN 3347, MATH 3320, MEEN 3392)</i>	
MEEN 3349 Fund. MFG Processes	3	MEEN 3350 Machine Design I	3
<i>(prereq: MEEN 3344, MEEN 1310)</i>		<i>(prereq: MEEN 2302, MEEN 3145, MEEN 3344, CEEN 3311)</i>	
MEEN 3352 Kinematics of Machines	3	IEEN 3325 Engr Economic Analysis I²	3
<i>(prereq: MEEN 2302, MATH 2414)</i>		<i>(prereq: junior standing)</i>	
MEEN 3392 Fluid Mechanics	3	MEEN 4341 Appl. Thermodynamics	3
<i>(prereq: MATH 3320, coreq: MEEN 2302)</i>		<i>(prereq: MEEN 3347, MATH 3415)</i>	
MEEN 3370 Intro to ElectroMech Sys Design	3	MEEN 3360 Engineering Design and Simulation	3
<i>(prereq: PHYS 2326/2126)</i>		<i>(prereq: MEEN 1310, MEEN 1320, co-req: MEEN 3350, MEEN 3348)</i>	
Lang/Phil/Culture Elective ^^	3		
18			15
SENIOR YEAR			
MEEN 4131 Mechanical Engr. Lab	1	MEEN 4264 ME Design Projects II	2
<i>(prereq: MEEN 2146, MEEN 3348)</i>		<i>(prereq: IEEN 3325 or eq, MEEN 4263, MEEN 4351)</i>	
MEEN 4263 ME Design Project I	2	Engineering Elective	3
<i>(prereq: ENGL/COMS 2374, MEEN 3348, 3350, 3360, coreq: MEEN 4351)</i>			
MEEN 4344 Control of Systems	3	Engineering Elective	3
<i>(prereq: Sr Standing in Engineering)</i>			
MEEN 4351 Machine Design II	3	HIST 1302 American History	3
<i>(prereq: MEEN 3350, MEEN 3352)</i>			
POLS 2302 Govt. & Politics of Texas	3	Social/Behavioral Elective^^	3
Engineering Elective	3		
15			14

Total Number of Hours: 129

A grade of "C" or better is required in any science, engineering or mathematics course required for the Mechanical Engineering degree.

Electives are selected from the following:

Engineering electives: MEEN 3398, 4301, 4303, 4305, 4307, 4317, 4335, 4336, 4343, 4345, 4346, 4347, 4348, 4349, 4352, 4354, 4355, 4371, 4372, 4373, 4382, 4385, 4395, 4396, 4397, EVEN 3399, EEEN 4357, CSEN 4367

^^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in the Catalog

¹ ENGL 2374 or COMS 2374 is required unless otherwise approved by faculty advisor and department chair.

² CEEN 3317 can be taken instead if IEEN 3325 has a time conflict or is not available.

³ Pre-Engineering Students and Alternate Pre-Engineering students are required to take UNIV 1201 instead of GEEN 1201.