Mechanical Engineering, B.S.

Accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org/

Course	Title	Semester Credit Hours
Freshman Year		
Semester 1		
CHEM 1311 & CHEM 1111	Gen Inorganic Chemistry I and Gen Inorganic Chem Lab I	4
ENGL 1301	Rhetoric and Composition	3
GEEN 1201	Engineering as a Career [3]	2
MATH 2413	Calculus I	4
MEEN 1310	Engineering Graphics I	3
	Semester Credit Hours	**16**
Semester 2		
ENGL 1302	Rhetoric and Composition	3
HIST 1301	American History to 1877	3
MATH 2414	Calculus II	4
MEEN 1320	Elem Num Meth & Engr Prob Solv	3
PHYS 2325 & PHYS 2125	University Physics I and University Physics I Lab	4
	Semester Credit Hours	**17**
Sophomore Year		
Semester 1		
CEEN 2301	Mechanics I	3
MATH 3320	Differential Equations	3
PHYS 2326 & PHYS 2126	University Physics II and University Physics II Lab	4
POLS 2301	Government and Politics of US	3
Creative Arts		3
	Semester Credit Hours	**16**
Semester 2		
CEEN 3311	Strength of Materials	3
MATH 3415	Calculus III	4
MEEN 2146	Engineering Measurements	1
MEEN 2302	Mechanics II Dynamics	3
MEEN 3145	Material Science Laboratory	1
MEEN 3344	Materials Science	3
Communications [1]		3
	Semester Credit Hours	**18**
Junior Year		
Semester 1		
MEEN 3347	Thermodynamics	3
MEEN 3349	Fundamentals of Mfg Processes	3
MEEN 3352	Kinematics of Machines	3
MEEN 3392	Fluid Mechanics	3
EEEN 3331	Circuits and Electrmag Devices	3
Lang/Phil/Culture		3
	Semester Credit Hours	**18**
Semester 2		
IEEN 3325	Engr Economic Analysis I [2]	3

HIST 1302	American History since 1877	3
MEEN 3348	Heat Transfer	3
MEEN 3350	Machine Design I	3
MEEN 3360	Engineering Design & Sim	3
MEEN 4341	Appl of Thermodynamics	3
	Semester Credit Hours	**18**
Senior Year		
Semester 1		
MEEN 4131	Mechanical Engineering Lab	1
MEEN 4263	Mech Engr Design Proj I (WI)	2
MEEN 4344	Control of Systems	3
MEEN 4351	Machine Design II	3
POLS 2302	Government and Politics of TX	3
Engineering Elective (p. 2)		3
	Semester Credit Hours	**15**
Semester 2		
MEEN 4264	Mech Eng Design Projects II	2
Social/Behavioral		3
Engineering Elective (p. 2)		3
Engineering Elective (p. 2)		3
MATH Elective (p. 3)		3
	Semester Credit Hours	**14**
	Total Credit Hours Required:	**132**

A grade of "C" or better is required in any science, engineering, or mathematics course required for the Mechanical Engineering degree or for any other course that is a prerequisite to a required course. Any course assigned a grade below a "C" must be repeated before enrolling in any course for which it is a prerequisite.

1 ENGL 2374 or COMS 2374 is required unless otherwise approved by adviser 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.

Engineering Electives

Code	Title	Semester Credit Hours
MEEN 3398	Comp App in Nuclear Engr	3
MEEN 4301	Design of Aerospace Structures	3
MEEN 4303	Aerodynamics	3
MEEN 4305	Aerospace Flight Dynamics	3
MEEN 4307	Aerospace Systems Design	3
MEEN 4317	Internal Combustion Engines	3
MEEN 4335	Special Problems	1-3
MEEN 4336	Selected Topics	1-3
MEEN 4343	Dynamics of Systems	3
MEEN 4345	Engineering Vibrations	3
MEEN 4346	Computatnl Methods in Mech Eng	3
MEEN 4347	Hydraulics of Pipeline Systems	3
MEEN 4348	Gas Dynamics	3
MEEN 4349	Air Conditioning	3
MEEN 4352	Design of Turbomachinery	3
MEEN 4354	Intro to Finite Elem Method	3
MEEN 4355	Robotics I	3

MEEN 4371	Introduction to UAVs	3
MEEN 4372	Resource Optimization for DHS	3
MEEN 4373	Info Anal. & Mod. in Sec Eng	3
MEEN 4382	Polymer Science & Engineering	3
MEEN 4385	Manufacturing of Composites	3
MEEN 4395	Therm Hydr of Nuclear Reactors	3
MEEN 4396	Fund. of Nuclear Engineering	3
MEEN 4397	Intro to Nuclear Power Plants	3
EVEN 3399	Nuclear Environment Protection	3
EEEN 4357	Wireless Sensor Networks	3
CSEN 4367	Data Mining	3

Math Electives

Code	Title	Semester Credit Hours
MATH 4341	Linear Alg and Matrix Theory	3
MATH 4370	Vector Analysis	3
MATH 4371	Laplace Transformation	3
MATH 4372	Math for Physics and Eng I	3
MATH 4373	Application of Matrix Methods	3
MATH 4374	Numerical Analysis	3
STAT 4303	Statistical Methods	3