

Mechanical Engineering, B.S.

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Course	Title	Semester Credit Hours
Freshman Year		
Semester 1		
CHEM 1311 & CHEM 1111	General Chemistry I and General Chemistry I Lab	4
Rhetoric & Composition		3
GEEN 1201	Engineering as a Career	2
MATH 2413	Calculus I	4
MEEN 1310	Engineering Graphics I	3
Semester Credit Hours		16
Semester 2		
Rhetoric & Composition		3
American History		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		
MEEN 2301	Mechanics I Statics	3
MATH 3320	Differential Equations	3
PHYS 2326 & PHYS 2126	University Physics II and University Physics II Lab	4
Government/Political Science		3
Creative Arts		3
Semester Credit Hours		16
Semester 2		
MEEN 3347	Thermodynamics	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
Communication		3
Semester Credit Hours		18
Junior Year		
Semester 1		
MEEN 3380	Engineering Analysis	3
MEEN 3349	Fundamentals of Mfg Processes	3
MEEN 3352	Kinematics of Machines	3
MEEN 3392	Fluid Mechanics	3
MEEN 3370	Introduction to Electromechanical System Design	3
Lang/Phil/Culture		3
Semester Credit Hours		18
Semester 2		
IEEN 3325	Engr Economic Analysis I ¹	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		15
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
Government/Political Science		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
American History		3
Semester Credit Hours		14
Total Credit Hours Required:		129

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

¹ CEEN 3317 can be taken instead if IEEN 3325 has a time conflict or is not available.

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 4309	Fabrication of Aero Structure	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 4348	Gas Dynamics	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	Fundamentals 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