

MECHANICAL ENGINEERING (B.S.)

Degree: Bachelor of Science

Major: Mechanical Engineering

Total Hours: 126

Code	Title	Hours
General Education Core Curriculum		
<i>Communication</i>		
ENGL 1301	Composition I	3
Select one of the following:		3
COMM 1315	Public Speaking I	
COMM 1321	Business and Professional Speech	
DSDE 1371	ASL I	
ENGL 1302	Composition II	
FREN 1311	Beginning French I	
SPAN 1311	Beginning Spanish I	
<i>Mathematics</i>		
MATH 2413	Calculus and Analytical Geometry I	4
<i>Life and Physical Sciences¹</i>		
PHYS 2425	University Physics I	4
PHYS 2426	University Physics II	4
<i>Language, Philosophy and Culture</i>		
PHIL 1370	Philosophy of Knowledge	3
	or PHIL 2306 Ethics	
<i>Creative Arts</i>		
Select one of the following:		3
ARTS 1301	Art Appreciation	
ARTS 1303	Art History I	
DANC 2304	Dance Appreciation	
MUSI 1306	Music Appreciation	
COMM 1375	Film Appreciation	
COSC 1324	The Art of Computer Game Development	
MUSI 1306	Music Appreciation	
MUSI 1309	Jazz History and Appreciation	
MUSI 1310	History of Rock and Roll	
PHIL 1330	Arts and Ideas	
THEA 1310	Theatre Appreciation	
<i>American History</i>		
Select two of the following:		6
HIST 1301	U S History I 1763-1877	
HIST 1302	U S History II Since 1877	
HIST 2301	Texas History	
<i>Government/Political Science</i>		
POLS 2301	Intro to American Government I	3
POLS 2302	Intro/American Government II	3
<i>Social and Behavioral Sciences</i>		
INEN 2373	Engineering Economics	3
<i>Component Area Option¹</i>		
MATH 2414	Calculus and Analytical Geometry II	4

Required Major Courses

<i>Engineering Courses</i>		
CHEM 1111	General Chemistry I Laboratory	1
CHEM 1311	General Chemistry I	3
ELEN 3310	Fundamentals of Electrical Engineering	3
INEN 3322	Engineering Materials and Manufacturing Processes	3
MATH 3301	Ordinary Differential Equations	3
MATH 2415	Calculus III	4
MATH 2318	Linear Algebra	3
MEEN 2301	Statics	3
MEEN 2302	Dynamics	3
MEEN 2372	Mechanics of Solids	3
MEEN 2374	Thermodynamics I	3
MEEN 3210	Measurements Lab	2
MEEN 3300	Design of Mechanism	3
MEEN 3310	Heat Transfer	3
MEEN 3311	Fluid Mechanics	3
MEEN 3320	Mechanical Design I	3
MEEN 3340	Engineering Analysis	3
MEEN 3350	Computer-Aided Engineering	3
MEEN 3380	Thermodynamics II	3
MEEN 4110	Seminar	1
MEEN 4310	Integrated System Design	3
MEEN 4313	Thermal Systems Design	3
MEEN 4316	Engineering Design Project	3
MEEN 4317	Dynamic Systems Analysis	3
MEEN 4319	Materials Science	3
MEEN 4323	Mechanical Design II	3
INEN 4320	Statistical Decision Making in Engineering	3
	or MATH 3370 Introduction to the Theory of Statistical Inference	
Electives		
	MEEN Technical Elective ²	6
Total Hours		126

¹ The additional hours from PHYS 2425 University Physics I & PHYS 2426 University Physics II are applied to the Component Area Option.

² Speak with department chair for approved courses.

Course	Title	Hours
First Year		
Fall		
ENGL 1301	Composition I	3
MATH 2413	Calculus and Analytical Geometry I	4
CHEM 1311	General Chemistry I	3
CHEM 1111	General Chemistry I Laboratory	1
Select one of the following:		3
HIST 1301	U S History I 1763-1877	
HIST 1302	U S History II Since 1877	
HIST 2301	Texas History	
Creative Arts Elective ¹		3
Hours		17
Spring		
MATH 2414	Calculus and Analytical Geometry II	4

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PHYS 2425	University Physics I	4
Select one of the following:		3
HIST 1301	U S History I 1763-1877	
HIST 1302	U S History II Since 1877	
HIST 2301	Texas History	
PHIL 2306 or PHIL 1370	Ethics or Philosophy of Knowledge	3
Communication Elective ²		3
Hours		17
Second Year		
Fall		
MATH 2415	Calculus III	4
PHYS 2426	University Physics II	4
MEEN 2301	Statics	3
MATH 2318	Linear Algebra	3
INEN 2373	Engineering Economics	3
Hours		17
Spring		
MATH 3301	Ordinary Differential Equations	3
MEEN 2302	Dynamics	3
MEEN 2372	Mechanics of Solids	3
MEEN 2374	Thermodynamics I	3
ELEN 3310	Fundamentals of Electrical Engineering	3
Hours		15
Third Year		
Fall		
MEEN 3340	Engineering Analysis	3
MEEN 3311	Fluid Mechanics	3
INEN 3322	Engineering Materials and Manufacturing Processes	3
POLS 2301	Intro to American Government I	3
MEEN 3380	Thermodynamics II	3
Hours		15
Spring		
MEEN 3210	Measurements Lab	2
MEEN 3310	Heat Transfer	3
MEEN 3300	Design of Mechanism	3
MEEN 3320	Mechanical Design I	3
POLS 2302	Intro/American Government II	3
MEEN 3350	Computer-Aided Engineering	3
Hours		17
Fourth Year		
Fall		
MEEN 4110	Seminar	1
MEEN 4310	Integrated System Design	3
MEEN 4313	Thermal Systems Design	3
MEEN 4319	Materials Science	3
MEEN 4323	Mechanical Design II	3
MEEN Technical Elective		3
Hours		16
Spring		
MEEN 4316	Engineering Design Project	3
MEEN 4317	Dynamic Systems Analysis	3
INEN 4320 or MATH 3370	Statistical Decision Making in Engineering or Introduction to the Theory of Statistical Inference	3
MEEN Technical Elective		3
Hours		12
Total Hours		126

Appreciation, COMM 1375 Film Appreciation, or PHIL 1330 Arts and Ideas.

² Communication electives: COMM 1315 Public Speaking I, COMM 1321 Business and Professional Speech, DSDE 1371 ASL I, FREN 1311 Beginning French I OR SPAN 1311 Beginning Spanish I.

³ Social and Behavioral Sciences elective

⁴ Or another calculus-based probability and statistics course approved by the MEEN chair.

Notes:

- All STEM courses require a grade of "C" or better to satisfy degree plan/prerequisite requirements.
- Degree Option: Mechanical Engineering Co-op students who successfully complete three Career Development courses may receive credit for one three-credit hour elective.

¹ Creative Arts electives are ARTS 1301 Art Appreciation, ARTS 1303 Art History I, DANC 2304 Dance Appreciation, MUSI 1306 Music