

MECHANICAL ENGINEERING

(last update 10/02/2018)

1 st Year	Session	Course	Course Name	SH	P: Prerequisite; C: Corequisite
	ALL*	MATH:1550	Engineering Math I: Single Variable Calculus	4	P: ALEKS Score of 75 or higher OR MPT 3 Score of 9 or higher
	F/Su*	ENGR:1100	Introduction to Engineering Problem Solving	3	
	ALL	CHEM:1110	Principles of Chemistry I	4	
	ALL	RHET:1030	Rhetoric	4	
	F	ENGR:1000	Engr Success for First Year Students	1	First Semester Standing
TOTAL				16	
	ALL*	MATH:1560	Engineering Math II: Multi-Variable Calculus	4	P: MATH 1550
	ALL	ENGR:1300	Introduction to Engineering Computing	3	C: MATH:1550
	ALL	PHYS:1611	Introductory Physics I	4	C: MATH:1550
	ALL	MATH:2550	Engineering Math III: Matrix Algebra	2	P: MATH:1550
	ALL		General Education Component #1	3	
TOTAL				16	
2nd Year					
	ALL	MATH2560	Engineering Math IV: Differential Equations	3	P:MATH:1560; MATH 2550
	F/S	PHYS:1612	Introductory Physics II (Without Lab)	3	P:PHYS:1611; C:MATH:1560
	ALL*	ENGR:2110	Engineering Fundamentals I: Statics	2	P:MATH:1550; C:MATH1560; C:PHYS:1611
	ALL	ENGR:2120	Engineering Fundamentals II: Electrical Circuits	3	C:MATH:2560
	ALL	ENGR:2130	Engineering Fundamentals III: Thermodynamics	3	P:CHEM:1110; PHYS:1611; C:MATH:1560
	ALL		General Education Component #2	3	
	F	ME:2020	Sophomore Seminar: Mechanical Engineering	0	Sophomore Status
TOTAL				17	
	ALL	ENGR:2720	Materials Science	3	P:CHEM:1110; C:MATH:1550
	ALL	ENGR:2750	Mechanics of Deformable Bodies	3	P:ENGR:2110; C:MATH:2560
	ALL	ENGR:2710	Dynamics	3	P:ENGR:2110; MATH:1550
	S	ME:2200	Introduction to Mechanical Engineering Design	2	P:ENGR:1100
	S	ME:2300	Manufacturing Processes	3	C: ENGR:2720, and (ME:2200 or BME:2710)
OR		STAT:2020	Probability and Stat for Engineering & Phys Sci	3	
	ALL		Elective Focus Area #1	3	
TOTAL				17	
3rd Year					
	F/S	MATH:3550	Engineering Math V: Vector Calculus	3	P:MATH:2560
	F/S	ENGR:2510	Fluid Mechanics	4	P:MATH:2560; ENGR:2710 C:ENGR:2130
	F	ME:3351	Engineering Instrumentation	2	P:PHYS:1612; ENGR:2120
	F	ME:3600	Control of Mechanical Engineering Systems	3	P:MATH:2550, MATH:2560, ENGR:2710
	ALL	STAT:2020	Probability and Stat for Engineering & Phys Sci	3	P:MATH:1560
OR		ME:2300	Manufacturing Processes	3	C ENGR:2720, and (ME:2200 or BME:2710)
	F/S	ME:3091	Professional Seminar: Mechanical Engineering	0	Junior Status
TOTAL				15	
	S/Su*	ME:3045	Heat Transfer	3	P:ENGR:2510; MATH:3550, ENGR:1300
	S/Su*	ME:3052	Mechanical Systems	4	P:ENGR:2750; C:ENGR:2760 ENGR:2720; STAT:2020
	ALL		Elective Focus Area #2	3	
	ALL		Elective Focus Area #3	3	
	ALL		General Education Component #3	3	
TOTAL				16	
4th Year					
	F	ME:4048	Energy Systems Design	4	P:ME:3045**
	F	ME:4055	Mechanical Systems Design	3	P:ENGR:2710; ME:3052
	ALL		Elective Focus Area #4	3	
OR	F/S	ME:4086	Mechanical Engineering Design Project	3	C:ME:4048 or ME:4055
	ALL		Elective Focus Area #5	3	
OR	F/S	ME:4080	Experimental Engineering	4	P:ME:3351 C:ME:3052; C:ME:3045
	ALL		General Education Component #4	3	
	F/S	ME:3091	Professional Seminar: Mechanical Engineering	0	Junior Status
TOTAL				16	
	F/S	ME:4086	Mechanical Engineering Design Project	3	C:ME:4048 or ME:4055
OR	ALL		Elective Focus Area #4	3	
	F/S	ME:4080	Experimental Engineering	4	P:ME:3351 C:ME:3052; C:ME:3045
OR	ALL		Elective Focus Area #5	3	
	ALL		Elective Focus Area #6	3	
	ALL		Elective Focus Area #7	3	
	ALL		General Education Component	3	
TOTAL				16	

*Summer courses are offered subject to meeting minimum enrollment requirements.

** Effective Fall 2020. ME:4048 will be offered in Fall 2019 with pre-requisites ME:3045 and ME:3040.