

MECHANICAL ENGINEERING

(last update 9/14/2021)

1 st Year	Session	Course	Course Name	SH	P: Prerequisite; C: Corequisite
	ALL	CHEM:1110	Principles of Chemistry I	4	P: ALEKS Score ≥ 55 OR MPT 3 Score ≥ 9
	F	ENGR:1000	Engr Success for First Year Students	1	First Semester Standing
	F	ENGR:1100	Introduction to Engineering Problem Solving	3	
	F/S	MATH:1550	Engineering Math I: Single Variable Calculus	4	P: ALEKS Score ≥ 75 OR MPT 3 Score ≥ 9
	ALL	RHET:1030	Rhetoric	4	
TOTAL				16	
	F/S	ENGR:1300	Introduction to Engineering Computing	3	C: MATH:1550
	ALL	MATH:1560	Engineering Math II: Multi-Variable Calculus	4	P: MATH:1550 with a minimum grade of C-
	ALL	MATH:2550	Engineering Math III: Matrix Algebra	2	P: MATH:1550 or MATH:1560
	ALL	PHYS:1611	Introductory Physics I	4	C: MATH:1550
	ALL		General Education Component #1	3	
TOTAL				16	
2nd Year					
	ALL*	ENGR:2110	Engineering Fundamentals I: Statics	2	P: MATH:1550; C: MATH:1560 & 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	MATH:2560	Engineering Math IV: Differential Equations	3	P: MATH:1560 & MATH 2550
	F	ME:2020	Sophomore Seminar: Mechanical Engineering	0	Sophomore Status
	F/S	PHYS:1612	Introductory Physics II	4	P: PHYS:1611; C: MATH:1560
	ALL		General Education Component #2	3	
TOTAL				18	
	ALL*	ENGR:2710	Dynamics	3	P: ENGR:2110 & MATH:1550
	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
	S	ME:2200	Introduction to Mechanical Engineering Design	2	P: ENGR:1100
	F/S	ME:2300	Manufacturing Processes	3	C: ENGR:2720 & (ME:2200 or BME:2710)
OR	ALL	STAT:2020	Probability and Stat for Engineering & Phys Sci	3	P: MATH:1560
	F/S		Focus Area #1	3	
TOTAL				17	
3rd Year					
	F/S	ENGR:2510	Fluid Mechanics	4	P: ENGR:2710 & MATH:2560; C: ENGR:2130
	F/S	MATH:3550	Engineering Math V: Vector Calculus	3	P: MATH: 1560 & MATH:2550; C: MATH:2560
	F	ME:3091	Professional Seminar: Mechanical Engineering	0	Junior Status
	F	ME:3351	Engineering Instrumentation	2	P: ENGR:2120 & PHYS:1612
	F	ME:3600	Control of Mechanical Engineering Systems	3	P: ENGR:2710 & MATH:2560
OR	ALL	STAT:2020	Probability and Stat for Engineering & Phys Sci	3	P: MATH:1560
	F/S	ME:2300	Manufacturing Processes	3	C: ENGR:2720, & (ME:2200 or BME:2710)
TOTAL				15	
	S	ME:3045	Heat Transfer	3	P: ENGR:2510 & MATH:3550 & ENGR:1300
	S	ME:3052	Mechanical Systems	4	P: ENGR:2750; C: ENGR:2720 & ME:2300 & STAT:2020
	F/S		Focus Area #2	3	
	F/S		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
OR	F/S		Focus Area #4	3	
	F/S	ME:4080	Experimental Engineering	4	P: ME:3351; C: ME:3045 & ME:3052
OR	F/S		Focus Area #5	3	
	F/S	ME:4086	Mechanical Engineering Design Project	3	C: ME:4048 or ME:4055
	ALL		General Education Component #4	3	
TOTAL				16/17	
OR	F/S	ME:4080	Experimental Engineering	4	P: ME:3351; C: ME:3045 & ME:3052
	F/S		Focus Area #4	3	
OR	F/S	ME:4086	Mechanical Engineering Design Project	3	C: ME:4048 or ME:4055
	F/S		Focus Area #5	3	
	F/S		Focus Area #6	3	
	F/S		Focus Area #7	3	
	ALL		General Education Component #5	3	
TOTAL				15/16	

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