MECHANICAL ENGINEERING (ME)

Program of Study — Catalog Year 2019-2020

	Fall Semester				Spring Semester			
	Terms Offered	Course	Course Title	Hrs.	Terms Offered	Course	Course Title	Hrs.
Freshman	F	EGR 110[1]	Introduction to Engineering I	1	Sp	EGR 111[1]	Introduction to Engineering II	1
	F, Sp, Su	EH 101	English Composition I	3	F, Sp, Su	EGR 150	Computer Methods in Engineering	3
	F, Sp, Su	MA 125	Calculus I	4	F, Sp, Su	EH 102	English Composition II	3
	F, Sp, Su	CH 115/116	General Chemistry I/Lab	4	F, Sp, Su	MA 126	Calculus II	4
	F, Sp, Su	ME 102	Engineering Graphics	2	F, Sp, Su	PH 221/221L	General Physics I and Laboratory	4
					F, Sp, Su	SBS 1[4]	Area IV Core Curriculum	3
			Total Credits	14			**Total Credits**	18
Sophomore	F, Sp, Su	CE 210	Statics	3	F, Sp, Su	ME 215	Dynamics	3
	F, Sp	EGR 265[2]	Math Tools for Engineering Problem Solving	4	F, Sp	CE 220	Mechanics of Solids	3
	F, Su	ME 241	Thermodynamics I	3	F, Sp	CE 221	Mechanics of Solids Laboratory	1
	F, Sp, Su	PH 222/222L	General Physics II and Laboratory	4	Sp	ME 242	Thermodynamics II	3
	F, Sp, Su	CH 117	Chemistry II	3	F, Sp, Su	SBS 2[4]	Area IV Core Curriculum	3
					F, Sp, Su	MA/SCI [3]	Math/Science Elective	3
			Total Credits	17			**Total Credits**	16
Junior	F	ME 321	Introduction to Fluid Mechanics	3	Sp	ME 322	Introduction to Heat Transfer	3
	F	ME 364	Linear Algebra and Numerical Methods	3	Sp	ME 360	Introduction to Mechatronic Systems Engineering	3
	F	ME 370	Kinematics and Dynamics of Machinery	3	Sp	ME 361/L	Thermo-Fluids Systems and Laboratory	3
	F, Sp, Su	MSE 280	Engineering Materials	3	Sp	ME 371	Machine Design	3
	F, Sp, Su	HFA 1[4]	Area II Core Curriculum	3	F, Sp, Su	EE 312	Electrical Systems	3
			Total Credits	15			**Total Credits**	15
Senior	F	MSE 401	Manufacturing Processes	3	Sp	ME 499	Capstone Design Project II	3
	F	ME 461/461L	Mechanical Systems and Laboratory	3	Sp	CE 395	Engineering Economics	3
	F	ME 498	Capstone Design Project I	3	F, Sp	ME 4XX[5]	Elective (2)	3
	F, Sp	ME 4XX[5]	Elective (1)	3	F, Sp	ME 4XX[5]	Elective (3)	3
	F, Sp, Su	HFA 2[4]	Area II Core Curriculum	3	F, Sp, Su	HFA 3[4]	Area II Core Curriculum	3
	F, Sp, Su	SBS 3[4]	Area IV Core Curriculum	3				
			Total Credits	18			**Total Credits**	15

1 Transfer students substitute EGR 200 (2hrs) for EGR 110/111

2 May substitute MA 227 and MA 252 for EGR 265 and one approved science or mathematics elective

3 Math/Science Elective chosen from approved list of courses

4 Please refer to the Core Curriculum as specified for Engineering majors

5 One ME elective in each of these three areas is required: thermal-fluids, mechanical systems, and computer-aided engineering

(1) Mechanical systems electives include: ME 430, ME 431, ME 464, ME 470, ME 475, ME 477, ME 478 and ME 480
(2) Thermal fluids electives include: ME 411, ME 421, ME 445, ME 447, ME 454, ME 455, ME 456
(3) Electives with computer-aided engineering content include: ME 421, ME 464