

FIRST YEAR			I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	FALL			3	Choose 1	Communication (Core)	c	010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade of "C" or better in ENGL 1301/1387.	See General Education Core for more details Options: ENGL 1301 <b>or</b> ENGL 1387 (H)
		!		4	MATH 2413	Calculus I	c	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
				3	Choose 1	Chemistry for Engineers	c	030	MATH 1314, MATH 1414, MATH 2412 or MATH 2487 with a grade of C or higher	Options: CHEM 1307 <b>or</b> CHEM 1309 <b>or</b> CHEM 1312
				1	Choose 1	Chemistry for Engineers Lab	c	090	Credit/registration in CHEM 1309	Options: CHEM 1107 <b>or</b> CHEM 1109 <b>or</b> CHEM 1112
				1	MECE 1101	Introduction to Mechanical Engineering		080		
				2	MECE 1221	Engineering Graphics				Includes Graphics Lecture and Lab sections
					UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
		14 Semester								
	SPRING			3	Choose 1	Communication (Core)	c	010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade of "C" or better in ENGL 1301/1387.	See General Education Core for more details Options: ENGL 1302 <b>or</b> ENGL 1388 (H) <b>or</b> ENGL 1305
		!		4	MATH 2414	Calculus II	c		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
				3	MECE 2340	Engineering Materials	c		A grade of 'C' or better in CHEM 1309 and CHEM 1109 or CHEM 1312 and CHEM 1112, and credit/registration in MECE 2140.	Lecture and lab must be taken together
				1	MECE 2140	Engineering Materials Lab			A grade of 'C' or better in CHEM 1309 and CHEM 1109 or CHEM 1312 and CHEM 1112, and credit/registration in MECE 2340.	Lecture and lab must be taken together
		!		4	PHYS 2425	Physics for Scientists and Engineers I		060/ 090	MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).	1 hour of lab to count for 090 Core
		15 Semester								
	SUMMER			3	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1301 <b>or</b> HIST 1387 <b>or</b> HIST/MASC 2327
			3	MANE 2332	Engineering Statistics	c		MATH 2413 (or MATH 2487)		
6 Semester										
SUMMER			3	MANE 3364	Manufacturing Processes			Course or Test: MECE 2140. May not be taken concurrently. AND Course or Test: MECE 2340. May not be taken concurrently. MANE 2332		
			1	MANE 3164	Manufacturing Processes Lab			Credit for MECE 2140 and credit/registration in MANE 3364. MECE 2340 may not be taken concurrently.		
	4 Semester									
SECOND YEAR	FALL	!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
				3	MECE 2350	Numerical Methods for Engineers	c		Credit/registration in MATH 2414 (or MATH 2487) grade of "C" or better	Lecture and lab sections
				3	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1302 <b>or</b> HIST 1388 <b>or</b> HIST/MASC 2328
		!		4	MECE 3449	Mechanical Engineering Analysis I	c		A grade of 'C' or better in MATH 2414 (or MATH 2488) and credit/registration in MECE 2350.	Lecture and lab sections
				3	MECE 2301	Statics	c		A grade of 'C' or better in MECE 1101 and PHYS 2425	
				4	PHYS 2426	Physics for Scientists and Engineers II		030	PHYS 2425.	
	17 Semester									
	SPRING	!		4	MECE 3450	Mechanical Engineering Analysis II	c		A grade of 'C' or better in MECE 2350 and MECE 3449.	Lecture and lab sections
				3	MECE 2302	Dynamics	c		A grade of 'C' or better in MECE 2301 and MATH 2414 (or MATH 2488)	Lecture and lab sections
				3	MECE 2335	Thermodynamics I	c		A grade of 'C' or better in CHEM 1309 or CHEM 1311, MATH 2414 (or MATH 2488) and PHYS 2425	
				3	ELEE 2317	Electrical and Electronic Systems	c		PHYS 2426	
			3	Choose 1	Integrative/Experiential Learning Option (Core)		090		Must choose ENGL from Humanities Section	
16 Semester										

THIRD YEAR	I H		Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
	FALL		3	MECE 3321	Mechanics of Solids	c		A grade of C or better in MATH 2414 (or MATH 2488) and MECE 2301 or MANE 2403	
			3	MECE 3315	Fluid Mechanics	c		A grade of 'C' or better in MECE 2335, MATH 2415 or MECE 3449, and MATH 3349 or MECE 3450	
			1	MECE 3115	Fluid Mechanics Laboratory	c		Credit/registration in MECE 3315 a grade of "C" or better	
			3	MECE 3304	System Dynamics	c		A grade of 'C' or better in MECE 2302 and MECE 3450	
			3	MECE 3380	Kinematics & Dynamics of Mach	c		A grade of 'C' or better in MECE 1221 and MECE 2302	
		3	Choose 1	Social and Behavioral Sciences (Core)		080		See General Education Core for course options. Recommended: ECON 2301, SOCI 1301, PSYC 2301	
	16 Semester								
SPRING		3	MECE 3320	Measurement & Instrumentation	c		A grade of 'C' or better in ELEE 2317, MANE 2332, and MECE 3450		
		3	MECE 3360	Heat Transfer	c		A grade of 'C' or better in MECE 3315		
		1	MECE 3160	Heat Transfer Laboratory	c		Credit/registration in MECE 3360 a grade of "C" or better		
		3	Choose 1	Technical Elective	c			MECE 3100, 33XX, or 43XX courses; see Faculty Advisor for Approval	
		3	MECE 4350	Machine Elements	c		A grade of 'C' or better in MECE 2302, MECE 2340, and MECE 3321		
		3	Choose 1	Professional Ethics		040		Options: PHIL 2326	
	16 Semester								
FOURTH YEAR	I H		Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
	FALL		3	MECE 4361	Senior Design Project I	c		A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350	
			3	MECE 3336	Thermodynamics II	c		A grade of 'C' or better in MECE 2335	
			1	MECE 4101	Fundamentals of Engineering	c		Junior standing in engineering and within two semesters of graduation.	
			3	Choose 1	Technical Elective	c			MECE 3100, 33XX, or 43XX courses; see Faculty Advisor for Approval
			3	Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)
		13 Semester							
	SPRING		3	MECE 4362	Senior Design Project II	c		A grade of 'C' or better in MECE 4361	
			3	Choose 1	Technical Elective	c			MECE 3100, 33XX, or 43XX courses; see Faculty Advisor for Approval
			3	Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)
			3	Choose 1	Creative Arts (Core)				See General Education Core for course options.
		12 Semester							

#### Graduation Requirements

**129 TOTAL HOURS**

**(54) TOTAL ADVANCED HOURS**

Graduation requirements 1. A composite GPA of 2.5 or better in Mechanical Engineering coursework is required. Also, all Mechanical Engineering coursework must be passed with a grade of 'C' or better.

#### Symbols Key

**Critical (!):** sequence sensitive course.

**Minimum Grade:** A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.

**General Education Core (GEC) Sections:** 010 - Communication; 020 - Mathematics; 030 - Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative Arts; 060 - American History; 070 - Government/Political Science; 080 - Social and Behavioral Sciences; 090 - Applied Communication and Literacies; 090 - Humanities; 090 - Leadership; 090 - Science Labs; 090 - Interdisciplinary ; 090 - Technologies; 090 - Language Diversity & Writing.

**Language Proficiency Requirement:** Student is required to demonstrate language proficiency in a language other than English at the undergraduate level equivalent to a minimum of six credits.