

## **Bachelor of Science in Mechanical Engineering**

(Focus)

	!	H Course #	Course Title	Min. GEC	Prerequisite	Additional Notes
	3	B ENGL 1301	Rhetoric and Composition I	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.	
	4	MATH 2413	Calculus I	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
FALL	3	CHEM 1307	Chemistry for Engineers	030	MATH 1314, MATH 1414, MATH 2412, or MATH 2487 with a grade of "C" or higher."	
	1	L CHEM 1107	Chemistry for Engineers Lab	090	Credit/registration in CHEM 1307.	
	1	MECE 1101	Introduction to Mechanical Engineering			
	2	MECE 1221	Engineering Graphics			Includes Graphic Lab.
AR		UNIV 1301	Learning Framework			Only if required, based on ACT/SAT and high school rank.
YE	1	4 Semester				, , , , , , , , , , , , , , , , , , , ,
ST	3	B ENGL 1302	Rhetoric And Composition II	010	A grade of 'C' or better in ENGL 1301 or ENGL 1387.	
뜐	4	1 MATH 2414	Calculus II	020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
2	3	MECE 2340	Engineering Materials		A grade of 'C' or better in CHEM 1307 and CHEM 1107 or CHEM 1311 and CHEM 1111, and credit/registration in MECE 2140.	
SPRIN	1	MECE 2140	Engineering Materials Laboratory		A grade of 'C' or better in CHEM 1307 and CHEM 1107 or CHEM 1311 and CHEM 1111, and credit/registration in MECE 2340.	
	4	PHYS 2425	Physics for Scientists and Engineers I	030	MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).	
	1	5 Semester				
SUMMERI	3	HIST 1301	U.S. History I	060		
Ξ	3	MANE 2332	Engineering Statistics		MATH 2413 (or MATH 2487).	
	6 Semester					
=	3	MANE 3364	Manufacturing Processes		Prerequisite MANE 2332	
SUMMER II	1	MANE 3164	Manufacturing Processes Lab		Credit for MECE 2140 and credit/registration in MANE 3364. MECE 2340 may not be taken concurrently.	
S.	4 Semester					
	-! H	H Course #	Course Title	Min. Grade GEC	Prerequisite	Additional Notes
	3	MECE 2350	Numerical Methods for Engineers		Credit/registration in MATH 2414 (or MATH 2488).	
	3	HIST 1302	U.S. History II	060		
FALL	4	MECE 3449	Mechanical Engineering Analysis I		A grade of 'C' or better in MATH 2414 (or MATH 2488) and credit/registration in MECE 2350.	
AR F4	3	MECE 2301	Statics		A grade of 'C' or better in MECE 1101 and PHYS 2425, and credit/registration in MATH 2414 (or MATH 2488).	
ΥE	4	PHYS 2426	Physics for Scientists and Engineers II	030	PHYS 2425.	
2	1	7 Semester				
9	4	1 MECE 3450	Mechanical Engineering Analysis II		A grade of 'C' or better in MECE 2450 and MECE 3449.	
SE	3	MECE 2302	Dynamics		A grade of 'C' or better in MECE 2301 and MATH 2414 (or MATH 2488).	
SPRIN	3	MECE 2335	Thermodynamics I		A grade of 'C' or better in CHEM 1307 or CHEM 1311, MATH 2414 (or MATH 2488) and PHYS 2425.	
	3	B ELEE 2317	Electrical and Electronic Systems		PHYS 2426.	
	3	B ENGL x3xx	Integrative and Experiential Learning			Choose ENGL from Humanities section
	10	6 Semester				

		! H	Course #	Course Title	Min. GEC Grade	Prerequisite	Additional Notes
		3	MECE 3321	Mechanics of Solids		A grade of C or better in MATH 2414 (or MATH 2488) and MECE 2301 or MANE 2403.	
THIRD YEAR		3	MECE 3336	Thermodynamics II		A grade of 'C' or better in MECE 2335.	
	FALL	3	MECE 3320	Measurements and Instrumentation		A grade of 'C' or better in ELEE 2317, MANE 2332, MECE 3450 and PHYS 2426.	
		3	MECE 3380	Kinematics and Dynamics of Machines		A grade of 'C' or better in MECE 1221 and MECE 2302.	
		3	X3XX	Social & Behavioral Science		See General Education Core Curriculum	
		15 Semester					
		3	MECE 3304	System Dynamics		A grade of 'C' or better in MECE 2302 and MECE 3450.	
	פַפ	3	MECE 3315	Fluid Mechanics		A grade of 'C' or better in MECE 2335, MATH 2415 or MECE 3449, and MATH 3349 or MECE 3450.	
	SPRING	1	MECE 3115	Fluid Mechanics Laboratory		Credit/registration in MECE 3315.	
	SP	3	MECE 43XX	Technical Elective I		Faculty Advisor Approval	
		3	POLS 2301	U.S. & Texas Government & Politics I	070		
		3	PHIL 1310	Ethics, Happiness, and the Good Life	040		Must enroll in Engineering designated section
		40	C +				
			Semester		101111		
		16 S	Course #	Course Title	GEC Grade	Prerequisite	Additional Notes
			Course #	Course Title Senior Design Project I	Grade GEC	Prerequisite A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350.	Additional Notes
		! Н	Course # MECE 4361		Grada GEC	A grade of 'C' or better in MECE 3304 and credit/registration in MECE	Additional Notes
		! H	Course # MECE 4361 MECE 3360	Senior Design Project I	GEC Grada	A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350.	Additional Notes
EAR	FALL	! H 3	Course #  MECE 4361  MECE 3360  MECE 3160	Senior Design Project I Heat Transfer	GEC Grada	A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350. A grade of 'C' or better in MECE 3315.	Additional Notes
YEA	FALL	! H 3	MECE 4361 MECE 3360 MECE 3160 MECE 4101	Senior Design Project I  Heat Transfer  Heat Transfer Laboratory	GEC Grade	A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350.  A grade of 'C' or better in MECE 3315.  Credit/registration in MECE 3360.	Additional Notes
YEA	FALL	3 3 1 1	MECE 4361 MECE 3360 MECE 3160 MECE 4101 MECE 4350	Senior Design Project I  Heat Transfer  Heat Transfer Laboratory  Fundamentals of Engineering	GEC GEARS	A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350. A grade of 'C' or better in MECE 3315. Credit/registration in MECE 3360. Junior standing in engineering and within two semesters of graduation.	Additional Notes
◂	FALL	3 3 1 1 3	MECE 4361 MECE 3360 MECE 3160 MECE 4101 MECE 4350	Senior Design Project I  Heat Transfer Heat Transfer Laboratory  Fundamentals of Engineering  Machine Elements	Grada	A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350. A grade of 'C' or better in MECE 3315. Credit/registration in MECE 3360. Junior standing in engineering and within two semesters of graduation.	Additional Notes
YEA		3 3 1 1 3 3 145	MECE 4361 MECE 3360 MECE 3160 MECE 4101 MECE 4350 POLS 2302 Semester MECE 4362	Senior Design Project I  Heat Transfer Heat Transfer Laboratory Fundamentals of Engineering  Machine Elements  U.S. & Texas Government & Politics II  Senior Design Project II	Grada	A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350.  A grade of 'C' or better in MECE 3315.  Credit/registration in MECE 3360.  Junior standing in engineering and within two semesters of graduation.  A grade of 'C' or better in MECE 2302, MECE 2340, and MECE 3321.  A grade of 'C' or better in MECE 4361.	Additional Notes
YEA		3 3 1 1 3 3 145	MECE 4361 MECE 3360 MECE 3160 MECE 4101 MECE 4350 POLS 2302 Semester MECE 4362	Senior Design Project I  Heat Transfer Heat Transfer Laboratory Fundamentals of Engineering  Machine Elements  U.S. & Texas Government & Politics II	Grada	A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350.  A grade of 'C' or better in MECE 3315.  Credit/registration in MECE 3360.  Junior standing in engineering and within two semesters of graduation.  A grade of 'C' or better in MECE 2302, MECE 2340, and MECE 3321.	Additional Notes
YEA	SPRING FALL	3 3 1 1 3 3 14 5 3	MECE 4361 MECE 3360 MECE 3160 MECE 4101 MECE 4350 POLS 2302 Semester MECE 4362 MECE 43XX	Senior Design Project I  Heat Transfer Heat Transfer Laboratory Fundamentals of Engineering  Machine Elements  U.S. & Texas Government & Politics II  Senior Design Project II	Grada	A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350.  A grade of 'C' or better in MECE 3315.  Credit/registration in MECE 3360.  Junior standing in engineering and within two semesters of graduation.  A grade of 'C' or better in MECE 2302, MECE 2340, and MECE 3321.  A grade of 'C' or better in MECE 4361.	Additional Notes
YEA		3 3 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	MECE 4361 MECE 3360 MECE 3160 MECE 4101 MECE 4350 POLS 2302 Semester MECE 4362 MECE 43XX	Senior Design Project I  Heat Transfer Heat Transfer Laboratory Fundamentals of Engineering  Machine Elements  U.S. & Texas Government & Politics II  Senior Design Project II Technical Elective II	Grada	A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350.  A grade of 'C' or better in MECE 3315.  Credit/registration in MECE 3360.  Junior standing in engineering and within two semesters of graduation.  A grade of 'C' or better in MECE 2302, MECE 2340, and MECE 3321.  A grade of 'C' or better in MECE 4361.  Faculty Advisor Approval	Additional Notes  See General Education Core Curriculum

**Graduation Requirements** 

129 TOTAL HOURS (50) TOTAL ADVANCED HOURS Approved: Wednesday, March 12, 2014 Revised: Friday, October 23, 2015

Symbols Key	
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Critical ('!'): sequence sensitive course.

P - Passing; S - Satisfactory.

General Education Core (GEC) Sections: 010 - Communication; 020 -Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; 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 -Computer Application; 090 - Interdisciplinary; 090 - Science Labs; 090 -Wellness.

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.