

	!	Н	Course #	Course Title	Min.	GEC	Prerequisite	Additional Notes
							For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI	
		3	Choose 1	Communication (Core)	С	010	reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade of "C"	See General Education Core for more details
				, ,			or better in ENGL 1301/1387.	Options: ENGL 1301 or ENGL 1387 (H)
			=				MATH 2412 with a grade of 'C' or better; or passing the Precalculus	
		4	MATH 2413	Calculus I	С	020	Exemption Test administered by the Department of Mathematics.	
	, _	1	66614300	C 1C.'		090	Concurrent enrollment or credit for MATH 1314 or higher level	
	<b>4</b> –	3	CSCI 1380	Computer Science I		090	mathematics course.	
		3	CHEM 1300	Chemistry for Engineers	С		MATH 1314, MATH 1414, MATH 2412, MATH 2413 or MATH 2487 with a	Other option: CHEM 1311 or CHEM 1307
œ		3	CHEM 1309	Chemistry for Engineers			grade of "C" or higher.	Other option. Cheiw 1311 or Cheiw 1307
YEA		1	CHEM 1109	Chemistry for Engineers Lab	С	090	Credit/registration in CHEM 1309	Other option: CHEM 1111 or CHEM 1107
ST			UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
품				Learning Trainework				only in required, based on Acty SAT and high school rank.
		14	Semester	I			For all 010 assumes Catisfactors are an ENCL marking of ACT took on TCL	
		3	Charact 4	Communication (Core)		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"	See General Education Core for more details
		3	Choose 1			010		Options: ENGL 1302 or ENGL 1388 (H) or ENGL 1305
	, –	4	MATH 2414	Calculus II	С		or better in ENGL 1301/1387.  MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
		1		Introduction to Manufacturing Engineering	-		WATH 2415 (OF WATH 2467) WILL a grade OF C OF BELLET.	
	SPRING	3		Engineering Statistics	С		MATH 2413 (or MATH 2487).	
		2		Manufacturing Engineering Graphics	-		MATTI 2413 (OF MATTI 2407).	
		3		Social and Behavioral Sciences (Core)		080		See General Education Core Curriculum
		16	Semester	,				
	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	MANE 3351	Manufacturing Engineering Analysis			MATH 2414 (or MATH 2488) and CSCI 1380 (or CSCI 1387).	
		4		Physics for Scientists and Engineers I	С	030	MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or	
							MATH 2488).	
		3	MANE 4311	Quality Control			MANE 2332.	
	FALL	3	MFCF 2340	Engineering Materials			A grade of 'C' or better in CHEM 1309 and CHEM 1109 or CHEM 1312 and	
¥ '	_				$\perp$		CHEM 1112, and credit/registration in MECE 2140	
YE/		1	MECE 2140	Engineering Materials Laboratory			A grade of 'C' or better in CHEM 1309 and CHEM 1109 or CHEM 1312 and	
9							CHEM 1112, and credit/registration in MECE 2340	
8	_	3	MANE 3300 Semester	Computer-Aided Design			Either MANE 1204 or MECE 1221.	
SE		4	MATH 2415	Calculus III			MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
		3		Operations Research			MANE 3351.	
1	2	4		Physics for Scientists and Engineers II		030	PHYS 2425.	
	ž —	3		Engineering Economics			Credit/registration in MANE 2332.	
· ·	n	3		Fundamentals of Industrial Engineering			Credit/registration in MANE 2332.	
				,			. •	
		17	Semester					

	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	Choose 1	American History (Core)		060		See General Education Core for more details.  Options: HIST 1301 or HIST 1387 or HIST/MASC 2327
		4	MANE 2403	Engineering Mechanics	С		Grade of 'C' or better in PHYS 2425.	opaolis. 1101 202 61 11101 2007 61 11101/111/100 2027
		3	MATH 3341	Differential Equations			MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
		3	ELEE 2317	Electrical and Electronic Systems			PHYS 2426.	
	FALL	3	MANE 3364	Manufacturing Processes			Course or Test: MECE 2140. May not be taken concurrently. AND Course	
		-		0			or Test: MECE 2340. May not be taken concurrently.	
YEAR		1	MANE 3164	Manufacturing Processes Lab			Credit for MECE 2140 and credit/registration in MANE 3364. MECE 2340 may not be taken concurrently.	
B	17 Semester						,	
THIRD		3	Choose 1	American History (Core)		060		See General Education Core for more details.  Options: HIST 1302 or HIST 1388 or HIST/MASC 2328
	SPRING	3	MECE 3321	Mechanics of Solids			A grade of C or better in MATH 2414 (or MATH 2488) and MECE 2301 or MANE 2403.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	PR	3	MANE X3XX	Technical Elective I				
	<b>U</b> 1	3	MANE 3302	Computer-Aided Manufacturing			Credit/registration in MANE 3364.	
		3	MANE 4365	Tool Design			MANE 3300.	
		3	Choose 1	Creative Arts (Core)		050		See General Education Core Curriculum
			Semester		Ma			
		Н	Course #	Course Title	Grade	GEC	Prerequisite	Additional Notes
		3	Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)
		3	MANE 4331	Manufacturing Planning and Control			Credit/registration in MANE 4340.	
	FALL	1	MANE 4173	Product Design and Mass Customization			MANE 3337.	
OURTH YEAR	Œ	3	MANE 4361	Senior Design I			(MANE 3337 and credit/registration in MECE 3321) or (Grade of 'C' or better in MECE 3304 and MECE 3320, and credit/registration in MECE 3380, MECE 3360 and MECE 4350).	
<b>→</b>		3	MANE 43XX	Technical Elective II				
Ε		3	MANE 4352	Manufacturing Simulation			Grade of 'C' or better in MANE 2332	
Ö	16 Semester							
		3	Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)
		3	MANE 43XX	Technical Elective III				
	SPRING	4	MANE 3437	Thermal and Fluid Sciences			Grade of 'C' or better in either MANE 2403, or MECE 2301, and credit/registration in MATH 3349.	
	8	3	Choose 1	Language, Philosophy & Culture (Core)				Options: PHIL 1310 (Must enroll in Engineering designated section) or PHIL 2326
		3		Senior Design II			MANE 4361.	
		16	Semester					

CORE: The 2018-2019 list of core courses can be found at: www.utrgv.edu > Academics > Undergraduate > General Education Core www.utrgv.edu/core

## **Graduation Requirements**

131 TOTAL HOURS (60) TOTAL ADVANCED HOURS Approved: Wednesday, April 4, 2018 Revised: Wednesday, April 4, 2018

## Symbols Key

Critical ('!'): sequence sensitive course.

S - Satisfactory.

General Education Core (GEC) Sections: 010 - Communication; 020 - Mathematics; 030 - Language Proficiency Requirement: Student is required to demonstrate Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative Arts; 060 - language proficiency in a language other than English at the 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.

undergraduate level equivalent to a minimum of six credits.