The University of Texas Rio Grande Valley

Bachelor of Science in Manufacturing Engineering (BSMFGE) Manufacturing Engineering

2020-2021

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4 WATH 2413 Calculus I C C220 Exemption Test administered by the Department of Mathematics. 3 CSCI 1380 Computer Science I 0 990 Concurrent enrollment or credit for MATH 1314 or higher level mathematics course. 3 CHEM 1309 Chemistry for Engineers C 0 990 Concurrent enrollment or credit for MATH 2413 with a grade of "C" or higher. 1 CHEM 1109 Chemistry for Engineers Lab (Core) C 0 990 Credit/registration in CHEM 1309 1011 Academic and Career Success 1001 1010 Academic and Career Success 1001 Or Credit/registration in CHEM 1309 As required, based on credit hours of School rank, major declaration. 14 Semester Total Hours For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI 001 itving and Working by Design See General Education Core for mor Options: ENGL 1302, a grade of "C" or better in ENGL 1301. 4 MATH 2414 Calculus II C MATH 2413 with a grade of "C" or or better. See General Education Core Curricu 1305 4 MATH 2414 Calculus II C MATH 2413 and credit for or enrollment in MATH 2414. See General Education Core Curricu 1415 3 MANE 1204 Manufacturing Engineering Graphics G MATH 2413 and concurrent enrollment	e details
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A grade of 'C' or better in CHEM 1309 and CHEM 1109 or CHEM 1312 and CHEM 1112: a grade of 'C' or better or concurrent enrollment in MECE 2340	
3 MANE 3300 Computer-Aided Design C Either MANE 1204 or MECE 1221 or ENGR 1304.	
17 Semester Total Hours	
4 MATH 2415 Calculus III MATH 2414 with a grade of 'C' or better.	
3 MANE 4340 Operations Research C Grade of 'C' or better in MANE 3351.	
4 PHYS 2426 Physics for Scientists and Engineers II C 030 PHYS 2425. 1 hour of lab to count for 090 Core	
3 MANE 3337 Engineering Economics C Credit/registration in MANE 2332 or MANE 3332.	
3 MANE 3340 Fundamentals of Industrial Engineering C Credit/registration in MANE 3332.	
17 Semester Total Hours	

CORE: The 2020-2021 list of core courses can be found in the 2020-2021 Undergraduate Catalog: www.utrgv.edu/catalog > See 'Core Curriculum'

	!	Н	Course #		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/MASC 2327
		4	MANE 2403	Engineering Mechanics	С		Grade of 'C' or better in PHYS 2425.	
		3	MATH 3341	Differential Equations			MATH 2414 with a grade of 'C' or better.	
	FALL	3	ELEE 2317	Electrical and Electronic Systems			Grade of C or better in: PHYS 2426.	
		3	MANE 3364	Manufacturing Processes	С		MECE 2140 and 2340.	
D YEAR		1	MANE 3164	Manufacturing Processes Lab			Credit for MECE 2140 and credit/registration in MANE 3364. MECE 2340 may not be taken concurrently.	
HIRI		17 Semester Total Hours						
		3	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328
	_	3	MECE 3321	Mechanics of Solids			A grade of C or better in MATH 2414 and MECE 2301 or MANE 2403.	
	PNING	3	MANE X3XX	Prescribed Elective I				
	2	3	MANE 3302	Computer-Aided Manufacturing			Credit/registration in MANE 3364.	
		3	MANE 4365	Tool Design			Grade of 'C' or better in [MANE 3300, MANE 3337, MANE 3340, and MANE 3364].	
		3		Creative Arts (Core)		050		See General Education Core Curriculum
			Semester Tota		Min.	-		
	1	Н		Course Title	Grade		Prerequisite	Additional Notes
	_	3	POLS 2305	U.S. Federal Govt & Politics		070		
AR		3	MANE 4331	Manufacturing Planning and Control			Grade of 'C' or better in MANE 4340.	
		1	MANE 4173	Product Design and Mass Customization			MANE 3337.	
	FALL	3	MANE 4361	Senior Design I			Grade of 'C' or better in [MANE 3337 and MANE 3340] and credit for/registration in [MANE 4173, MANE 4311, MANE 4352 and MANE 4331].	
1 XE		3	MANE 43XX	Prescribed Elective II				
JRTH		3	MANE 4352	Manufacturing Simulation			Grade of 'C' or better in MANE 2332 or MANE 3332.	
<u>5</u>		16 Semester Total Hours						
Citions		3	POLS 2306	Texas Government & Politics		070		
	,	3	MANE 43XX	Prescribed Elective III				
	SPRIN	4	MANE 3437	Thermal and Fluid Sciences			Grade of 'C' or better in either [MANE 2403 or MECE 2301 or ENGR 2301] and credit/registration in MATH 3341.	
		3	PHII 2326	Ethics, Technology and Society		040		
		3	11112 2320					
		3		Senior Design II			MANE 4361.	

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.

131 TOTAL HOURS

(42 advanced minimum credit hours)

Approved: Thursday, March 26, 2020 Revised: Monday, February 8, 2021