## **Bachelor of Science in Engineering Technology**

## The University of Texas RioGrande Valley

	!	н	Course #	Course Title	Min.	GEC	Prerequisite	Additional Notes
					Grade			
FALL		3	Choose 1	Communication (Core)	с	010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more details Options: ENGL 1301
		4	MATH 2413	Calculus I (Core)	с	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	See General Education Core for more details.
		2	ENGT 1201	Foundations of Engineering Technology				
Ę		3	ENGT 1310	Design Graphics I				
YEAR		3	CHEM 1311	General Chemistry I			MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 2412, or MATH 2413 with a grade of "C" or higher."	or CHEM 1309
FIRST		1	CHEM 1111	General Chemistry I Lab (Core)		090	Credit/Registration in CHEM 1311	or CHEM 1109
			UNIV	1301 Learning Framework 1101 Academic and Career Success 1001 Living and Working by Design				As required, based on credit hours earned, TSI status, High School rank, major declaration.
		16 9	Semester Tota					
		3	ENGT 1320	Design Graphics II			ENGT 1310	
		4	MATH 2414	Calculus II	С		MATH 2413 with a grade of 'C' or better.	
SPRING		4	PHYS 1401	General Physics I/Lab I		030	MATH 1414, MATH 1314, MATH 2412, or MATH 2413.	1 hour of lab to count for 090 Core; Or may select PHYS 2425. Prerequisite: MATH 2413 and concurrent enrollment in MATH 2414.
		3	ENGT 2307	Engineering Materials			CHEM 1311 or CHEM 1309	
		14 Semester Total Hours						
	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		1	ENGT 1105	Machine Shop Lab			ENGT 1310	
		3	MANE 3332	Engineering Statistics			MATH 2413 and credit for or enrollment in MATH 2414.	
COND YEAR		4	PHYS 1402	General Physics II/Lab II		030	PHYS 1401.	1 hour of lab to count for 090 Core; Or may select PHYS 2426. Prerequisite: PHYS 2425
		3	Choose 1	Communication (Core)		010		See General Education Core for more details Options: ENGL 1302 or ENGL 1305
		3	CSCI 1380	Computer Science I		090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.	
SEC	14		Semester Tota					
		3	ENGT 2310	Manufacturing Processes			ENGT 2307.	
SPRING		3	ENGT 2321	Industrial Electronics			PHYS 1402 or 2426 and MATH 2413	
		3	Choose 1	Social and Behavioral Sciences (Core)		080		
		2	ENGT 2201	Programming for Engineering Applications			CSCI 1380	
		3		Prog. Logic Controllers			ENGT 2321	
	14 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 #		∕lin. GEC rade	Prerequisite	Additional Notes
		3	ENGT 3318	Instruments and Transducers		ENGT 3303	
		3	ENGT 3301	Computer Numerical Control		ENGT 1105, ENGT 1320, and ENGT 2307	
FALL		3	ENGT 3315	Fluid Power Systems		ENGT 1310, ENGT 2321, and PHYS 1402 or 2426	
F		3	Choose 1	American History ( Core)	060		See General Education Core for more details. Options: HIST 1301 or HIST/MASC 2327.
		3	ENGT 3313	Intro to Systems Engineering		CSCI 1380	
4		15 5	Semester Tota	al Hours			
VEA		3	MANE 3337	Engineering Economics		Credit/registration in MANE 3332	
HIRD		3	ENGT 4315	Robotics		ENGT 3303	
		3	ENGT 3320	Networked Systems in Manufacturing		ENGT 2321 & ENGT 2310	
		3	Choose 1	American History ( Core)	060		See General Education Core for more details. Options: HIST 1302 <b>or</b> HIST/MASC 2328.
		3	Choose 1	ENGT Practicum			ENGT 3305 or three instances of ENGT 3105. Full time one semester internship or three semesters of part-time internship/research. Best done in summer.
		2	ENGT 4201	Technical Project I		ENGT 2310, ENGT 3303, credit for/enrollment in ENGT 3318	
		17 5	Semester Tota	al Hours			
	ļ	Н	Course #	Course Title	/lin. GEC rade	Prerequisite	Additional Notes
		2	ENGT 4310	System Simulation and Optimization		ENGT 3313	
		3	Choose 1	Advanced Engineering Technology Elective			ENGT 3300, ENGT 3310, ENGT 3321, ENGT 4311, ENGT 4312
FALL		3	ENGT 4322	Mechatronic Systems Design		ENGT 3310	
<u>س</u>		3	ENGT 4335	Project Management		MANE 3337, ENGT 3324.	
AR		_		U.S. Federal Govt & Politics	070		
H YEAR	14 Semester Total Hours						
OURTH		3	PHIL 2326	Ethics, Technology and Society (Core)	040		
		2	ENGT 4202	Technical Project II		ENGT 4201	
SPRING		3	ENGT 4326	Quality Control & Lean Six Sigma		MANE 3332	Co-requisite: ENGT 4126
R		3	POLS 2306	Texas Government & Politics	070		
		3	Choose 1	Creative Arts (Core)	050		
		1	ENGT 4126	Metrology Lab		ENGT 1320, MANE 3332, ENGT 3301	
	15 Semester Total Hours						

## 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.

## 120 TOTAL HOURS (42 advanced minimum credit hours)

Approved: Friday, March 27, 2020 Revised: Monday, February 8, 2021