

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
FIRST YEAR	FALL	3		Choose 1	Communication (Core)	C	010	For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more details Option: ENGL 1301	
		4		MATH 2413	Calculus I (Core)	C	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.		
		2		ENGT 1201	Foundations of Engineering Technology					
		3		ENGT 1310	Design Graphics I					
		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	
		1		CHEM 1111	General Chemistry I Lab (Core)			090	Credit/registration in CHEM 1311	or CHEM 1109 (has co-requisite of credit/registration in CHEM 1309)
					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 Semester Total Hours										
FIRST YEAR	SPRING	3		ENGT 1320	Design Graphics II			ENGT 1310		
		4		MATH 2414	Calculus II	C		MATH 2413 with a grade of 'C' or better.		
		4		PHYS 1401	General Physics I (Core)			030	MATH 1414, MATH 1314, MATH 2412, or MATH 2413.	or may select PHYS 2425 (Prerequisite: MATH 2413.) 1 hour of lab to count for 090 Core
		3		ENGT 2307	Engineering Materials				CHEM 1311 or CHEM 1309	
14 Semester Total Hours										
		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
SECOND YEAR	FALL	1		ENGT 1105	Machine Shop Lab			ENGT 1310		
		3		MANE 3332	Engineering Statistics			MATH 2413 and credit for or enrollment in MATH 2414.		
		4		PHYS 1402	General Physics II (Core)			030	PHYS 1401.	or may select PHYS 2426 (Prerequisite: PHYS 2425 and MATH 2414.) 1 hour of lab to count for 090 Core
		3		Choose 1	Communication (Core)			010	For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more details Options: ENGL 1302 or ENGL 1305
		3		CSCI 1380	Introduction to Programming (Core)			090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.	Choose a section using Python
		14 Semester Total Hours								
SECOND YEAR	SPRING	3		ENGT 2310	Manufacturing Processes			ENGT 2307.		
		3		ENGT 2321	Industrial Electronics			PHYS 1402 or 2426 and MATH 2413		
		3		Choose 1	Social and Behavioral Sciences (Core)			080		See General Education Core for course options. Recommended: ECON 1301
		3		ENGT 3310	Fundamentals of Product Design				Pre-requisite: ENGT 1320 and ENGT 2310.	
		3		ENGT 3303	Prog. Logic Controllers				Co-requisite: ENGT 2321.	
15 Semester Total Hours										

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
THIRD YEAR	FALL	3		ENGT 3318	Instruments and Transducers			ENGT 3303	
		3		ENGT 3301	Computer Numerical Control			ENGT 1105, ENGT 1320, and ENGT 2307	
		3		ENGT 3315	Fluid Power Systems			ENGT 1310, ENGT 2321, and PHYS 1402 or 2426	
	3		Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1301 or HIST 2327.	
	3		ENGT 3313	Intro to Systems Engineering			CSCI 1380		
	15 Semester Total Hours								
SPRING		3		MANE 3337	Engineering Economics			Credit/registration in MANE 3332	
		3		ENGT 4315	Robotics			ENGT 3303	
		3		ENGT 3324	Metrology			ENGT 1320, MANE 3332, ENGT 3301	
	3		Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1302 or HIST 2328.	
	3		Choose 1	ENGT Practicum				ENGT 3305 (full-time one semester internship) -OR- three instances of ENGT 3105 (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 Semester Total Hours									
		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FOURTH YEAR	FALL	3		ENGT 4310	System Simulation and Optimization			ENGT 3313	
		3		Choose 1	Advanced Engineering Technology Elective				ENGT 3300, ENGT 3321, ENGT 4311, ENGT 4312, ENGT 3320
		3		ENGT 4322	Mechatronic Systems Design			ENGT 3310	
	3		ENGT 4335	Project Management			MANE 3337, ENGT 3324.		
	3		POLS 2305	U.S. Federal Govt & Politics (Core)		070			
	15 Semester Total Hours								
SPRING		3		PHIL 2326	Ethics, Technology and Society (Core)		040		
		2		ENGT 4202	Technical Project II			ENGT 4201	
		3		ENGT 4326	Quality Control & Lean Six Sigma			MANE 3332	Co-requisite: ENGT 4126
		3		POLS 2306	Texas Government & Politics (Core)		070		
3		Choose 1	Creative Arts (Core)		050		See General Education Core for course options.		
14 Semester Total Hours									

CORE: The 2022-2023 list of core courses can be found in the 2022-2023 Undergraduate Catalog: www.utrgv.edu/catalog > See 'Core Curriculum'

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: Tuesday, November 8, 2022

Revised: Thursday, October 20, 2022