



## Bachelor of Science (BS) Engineering Technology

2025-2026

		H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
FIRST YEAR	FALL	3	Choose 1	Communication	C	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 or ENGL 1305	
		4	MATH 2413	Calculus I	C	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					
		3	ENGT 1310	Design Graphics I					
	3	CHEM 1311 or 1309	General Chemistry I			MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 2412, or MATH 2413 with a grade of "C" or higher."	See General Education Core for more details.		
	1	CHEM 1111 or 1109	General Chemistry I Lab		090	Credit/Registration in CHEM 1301	See General Education Core for more details.		
		UNIV	1301 Learning Framework 1101 Academic and Career Success 1001/1300 Living and Working by Design				As required, based on a number of factors such as credit hours earned, TSI status, high school rank, major declaration, etc.		
	16 Semester Total Hours								
SPRING	3	ENGT 1320	Design Graphics II			ENGT 1310.			
	4	MATH 2414	Calculus II	C		MATH 2413 (or MATH 2487) with a grade of 'C' or better.			
	4	PHYS 1401 or PHYS 2425	General Physics I/Lab I or Physics for Scientists and Engineers I		030/ 090	PHYS 1401: MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 2412, or MATH 2413 with a grade of "C" or higher." PHYS 2425: 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									
		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	C		MATH 2413 and credit for or enrollment in MATH 2414.		
		4	PHYS 1402 or PHYS 2426	General Physics II or Physics for Scientists and Engineers II		030/ 090	PHYS 1402: PHYS 1401. PHYS 2426: PHYS 2425 and MATH 2414.	1 hour of lab to count for 090 Core	
		3	ENGT 2310	Manufacturing Processes			ENGT 2307.		
	3	Choose 1	Communication		010		See General Education Core for more details Options: ENGL 1302 or ENGL 1305		
	3	CSCI 1380	Introduction to Programming in Python	C	090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.			
	17 Semester Total Hours								
	SPRING	3	ENGT 2321	Industrial Electronics	C		PHYS 1402 or 2426 and MATH 2413.		
		3	ENGT 3313	Intro to Systems Engineering			Grade of C or better in CSCI 1380 and MANE 3332.	Substitute by ENGT-3300-02/ENGT 3340 Applied Mechanics. Pre req PHYS 1402	
		3	Choose 1	Social and Behavioral Sciences		080		ECON 1301 Introduction to economics.	
		3	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1301 or HIST/MASC 2327	
	3	ENGT 3301	Computer Numerical Control			ENGT 1105, ENGT 1320, ENGT 2310.			
15 Semester Total Hours									

CORE: The 2024-2026 list of core courses can be found at: [www.utrgv.edu](http://www.utrgv.edu) > Academics > Undergraduate > General Education Core [www.utrgv.edu/core](http://www.utrgv.edu/core)

### Symbols Key

**Minimum Grade:** A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.  
**Bolded Course #:** Program Admission Requirement

**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.

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THIRD YEAR	FALL	3	ENGT 3318	Instruments and Transducers			Grade of C or better in ENGT 2321.	
		3	ENGT 3310	Fundamentals of Product Design			ENGT 1320 and ENGT 2310.	
		3	ENGT 3315	Fluid Power Systems			ENGT 1310, ENGT 2321.	
		3	MANE 3337	Engineering Economics			Credit/registration in MANE 2332 or MANE 3332.	
		3	ENGT 4310	System Simulation and Optimization			ENGT 3313.	Substitute by ENGT-3300-03/ENGT 3351 Principles of Machine Design. Pre-req Applied Mechanics
	<b>15 Semester Total Hours</b>							
	SPRING	3	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328.
		3	ENGT 3305	Full Semester Co-op or Internship				ENGT 3105 may be repeated for credit instead of taking ENGT 3305. Contact the department of the course for guidance.
		3	ENGT 3324	Metrology			MANE 3332, ENGT 3301.	
		3	ENGT 3303	Prog. Logic Controllers			ENGT 2321.	
		3	POLS 2305	US Federal Government & Politics		070		
	<b>15 Semester Total Hours</b>							
		H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FOURTH YEAR	FALL	3	ENGT 4322	Mechatronic Systems Design			ENGT 3310, ENGT 3318, ENGT 3351.	
		2	ENGT 4201	Technical Project I			ENGT 2310, ENGT 3303, and credit for or enrollment in ENGT 3318.	
		3	ENGT 4335	Project Management			MANE 3337.	
		3	Choose 1	Prescribed Elective				See Degree Plan for details.
		3	ENGT 4315	Robotics			ENGT 3303.	
	<b>14 Semester Total Hours</b>							
	SPRING	3	PHIL 2326	Ethics, Technology and Society		040		
		2	ENGT 4202	Technical Project II			ENGT 4201, ENGT 4335, ENGT 4322.	
		3	ENGT 4326	Quality Control & Lean Six Sigma			MANE 3332 and credit or registration in ENGT 3324.	
		3	POLS 2306	Texas Government & Politics		070		
		3	Choose 1	Creative Arts		050		
	<b>14 Semester Total Hours</b>							

**120 TOTAL HOURS**

**(42) Advanced minimum credit hours**

Revised: Tuesday, February 18th, 2025