



Bachelor of Science (BS) Engineering Technology

2024-2026

	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			Only if required, based on ACT/SAT and high school rank.
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	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							
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	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/B Topics in ET: 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 2307.	
15 Semester Total Hours							

CORE: The 2024-2026 list of core courses can be found at: www.utrgv.edu > Academics > Undergraduate > General Education Core 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 and PHYS 2426 or PHYS 1402.	
		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/C Topics in ET: Machine Design. Pre-req Applied Mechanics
15 Semester Total Hours							
THIRD YEAR	SPRING	3	Choose 1	American History		060	See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328.
		3	ENGT 3300 or ENGT 3321	Topics in Engineering Technology or Solar Energy Systems		ENGT 3300: Consent of instructor. ENGT 3321: ENGT 2321	ENGT 3300-01/A Motors and Transformers
		3	ENGT 3324	Metrology		ENGT 1105, ENGT 1320, MANE 3332, ENGT 3301.	
		3	ENGT 3303	Prog. Logic Controllers		ENGT 2321.	
		3	POLS 2305	US Federal Government & Politics		070	
15 Semester Total Hours							
	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FOURTH YEAR	FALL	3	ENGT 4322	Mechatronic Systems Design		ENGT 3310.	
		2	ENGT 4201	Technical Project I		ENGT 3310, ENGT 3303, credit for/enrollment in ENGT 3318	
		3	ENGT 4335	Project Management		MANE 3337, ENGT 3324 and credit for or enrollment in ENGT 4201.	
		3	ENGT 3305 or ENGT 3105	Full Semester Co-op or Internship Part-time Internship or Research			ENGT 3305 or three instances of ENGT 3105.
		3	ENGT 4315	Robotics		ENGT 3303.	
14 Semester Total Hours							
FOURTH YEAR	SPRING	3	PHIL 2326	Ethics, Technology and Society		040	
		2	ENGT 4202	Technical Project II		ENGT 2310, ENGT 3303, and credit for or enrollment in ENGT 3318.	
		3	ENGT 4326	Quality Control & Lean Six Sigma		MANE 3332.	
		3	POLS 2306	Texas Government & Politics		070	
		3	Choose 1	Creative Arts		050	
14 Semester Total Hours							

120 TOTAL HOURS

(42) Advanced minimum credit hours

Revised: Thursday, August 29th, 2024