

**Bachelor of Science (BS)
 Engineering Technology**

The 2026-2027 list of core courses can be found in the 2026-2027 Undergraduate Catalog: www.utrgv.edu/catalog > See 'Bachelors Degree Program Regulations'

Symbols Key										
Campus: B - Offered in Brownsville; E - Offered in Edinburg; O - Offered Online; T - Travel Required										
Bolted Course Number*: Program Admission Requirement										
Min Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.										
Core: 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;										
Core: 090 - Applied Communication and Literacies; Humanities; Leadership; Science Labs; Interdisciplinary; Technologies; Language Diversity & Writing										
Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
1	Fall	3	B/E/O	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	
1	Fall	4	B/E/O	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.	
1	Fall	2	B/E	ENGT 1201	Foundations of Engineering Technology					
1	Fall	3	B/E	ENGT 1310	Design Graphics I					
1	Fall	3	B/E/O	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	Fall	1	B/E	CHEM 1111 or 1109	General Chemistry I Lab		090	Credit/Registration in CHEM 1301	See General Education Core for more details.	
1	Fall		B/E/O	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.	
1	Fall	16	Semester Total Hours							
1	Spring	3	B	ENGT 1320	Design Graphics II			ENGT 1310.		
1	Spring	4	B/E/O	MATH 2414	Calculus II	C		MATH 2413 (or MATH 2487) with a grade of 'C' or better.		
1	Spring	4	B/E/O	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	
1	Spring	3	B	ENGT 2307	Engineering Materials			CHEM 1311 or CHEM 1309.		
1	Spring	14	Semester Total Hours							
Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
2	Fall	1	B	ENGT 1105	Machine Shop Lab			ENGT 1310		
2	Fall	3	B/E	MANE 3332	Engineering Statistics	C		MATH 2413 and credit for or enrollment in MATH 2414.		
2	Fall	4	B/E/O	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	
2	Fall	3	B	ENGT 2310	Manufacturing Processes			ENGT 2307.		
2	Fall	3	B/E/O	Choose 1	Communication		010		See General Education Core for more details Options: ENGL 1302 or ENGL 1305	
2	Fall	3	B/E	CSCI 1380	Introduction to Programming in Python	C	090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.		
2	Fall	17	Semester Total Hours							
2	Spring	3	B	ENGT 2321	Industrial Electronics	C		PHYS 1402 or 2426 and MATH 2413.		
2	Spring	3	N/A	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	
2	Spring	3	B/E/O	Choose 1	Social and Behavioral Sciences		080		ECON 1301 Introduction to economics.	
2	Spring	3	B/E/O	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1301 or HIST/MASC 2327	
2	Spring	3	B	ENGT 3301	Computer Numerical Control			ENGT 1105, ENGT 1320, ENGT 2310.		
2	Spring	15	Semester Total Hours							

Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
3	Fall	3	B	ENGT 3318	Instruments and Transducers			Grade of C or better in ENGT 2321.		
3	Fall	3	B	ENGT 3310	Fundamentals of Product Design			ENGT 1320 and ENGT 2310.		
3	Fall	3	B	ENGT 3315	Fluid Power Systems			ENGT 1310, ENGT 2321.		
3	Fall	3	B/E	MANE 3337	Engineering Economics			Credit/registration in MANE 2332 or MANE 3332.		
3	Fall	3	N/A	ENGT 4310	System Simulation and Optimization			ENGT 3313.	Substitute by ENGT-3300-03/ENGT 3351 Principles of Machine Design. Pre-req Applied Mechanics	
3	Fall	15	Semester Total Hours							
3	Spring	3	B/E/O	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328.	
3	Spring	3	O	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	Spring	3	B	ENGT 3324	Metrology			MANE 3332, ENGT 3301.		
3	Spring	3	B	ENGT 3303	Prog. Logic Controllers			ENGT 2321.		
3	Spring	3	B/E/O	POLS 2305	US Federal Government & Politics		070			
3	Spring	15	Semester Total Hours							
Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
4	Fall	3	B	ENGT 4322	Mechatronic Systems Design			ENGT 3310, ENGT 3318, ENGT 3351.		
4	Fall	2	B	ENGT 4201	Technical Project I			ENGT 2310, ENGT 3303, and credit for or enrollment in ENGT 3318.		
4	Fall	3	B	ENGT 4335	Project Management			MANE 3337.		
4	Fall	3	B/E/O	Choose 1	Prescribed Elective				See Degree Plan for details.	
4	Fall	3	B	ENGT 4315	Robotics			ENGT 3303.		
4	Fall	14	Semester Total Hours							
4	Spring	3	B/E/O	PHIL 2326	Ethics, Technology and Society		040			
4	Spring	2	B	ENGT 4202	Technical Project II			ENGT 4201, ENGT 4335, ENGT 4322.		
4	Spring	3	B	ENGT 4326	Quality Control & Lean Six Sigma			MANE 3332 and credit or registration in ENGT 3324.		
4	Spring	3	B/E/O	POLS 2306	Texas Government & Politics		070			
4	Spring	3	B/E/O	Choose 1	Creative Arts		050			
4	Spring	14	Semester Total Hours							

120
(42) **TOTAL HOURS**
Advanced minimum credit hours

Revised: Tuesday, March 3, 2026