



Bachelor of Science in Electrical Engineering Electrical Engineering

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 English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See Core Curriculum for details. Option: ENGL 1301
		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.	
		3	CSCI 1381	Introduction to Programming C++	C	090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.	
		1	EECE 1101	Introduction to Electrical and Computer Engineering	C			
		3	Choose 1	Social and Behavioral Sciences		080		See Core Curriculum for course options.
			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.
	14 Semester Total Hours							
	SPRING	4	MATH 2414	Calculus II	C		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
		3	MATH 2346	Mathematics for Electrical and Computer Engineers	C		CSCI 1381 or CMPE 1170/1370 (or CMPE 1378/1178) or CSCI 1470 with a grade of 'C' or better, and MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
		4	PHYS 2425	Physics for Scientists and Engineers I	C	030	MATH 2413.	
		3	EECE 2306	Digital Systems Engineering I	C		Grade of C or better or registration in CMPE 1101 or ELEE 1101 or CSCI 1101 or EECE 1101.	
		1	EECE 2106	Digital Systems Engineering I Lab	C		Grade of C or better or registration in [CMPE 2330 or ELEE 2330 or EECE 2306].	
	15 Semester Total Hours							
	SUMMER	3	Choose 1	Communication	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 Core Curriculum for details. Options: ENGL 1302 or ENGL 1305
		3	Choose 1	Creative Arts		050		See Core Curriculum for course options.
	6 Semester Total Hours							
		H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
SECOND YEAR	FALL	3	MATH 3341	Differential Equations	C		MATH 2414 with a grade of 'C' or better.	
		4	PHYS 2426	Physics for Scientists and Engineers II	C	030	PHYS 2425 and MATH 2414.	
		3	EECE 2305	Electric Circuits I	C		Grade of C or better in MATH 2414 and [CMPE 1101 or ELEE 1101 or EECE 1101] and a grade of C or better or registration in PHYS 2426.	
		1	EECE 2105	Electric Circuits I Lab	C		Grade of C or better or registration in [CMPE 2320 or ELEE 2305 or EECE 2305].	
		3	EECE 2319	Numerical Computation and Data Visualization	C		Grade of C or better in CSCI 1381 and a grade of C or better or registration in MATH 2346.	
	14 Semester Total Hours							
	SPRING	4	MATH 2415	Calculus III	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
		3	CHEM 1309 or CHEM 1311	Chemistry for Engineers or General Chemistry I			Minimum grade of C is required in one of the following courses: MATH 1314, MATH 1414, MATH 2412, MATH 2413 or MATH 2487.	
		3	EECE 3321	Signals and Systems	C		Grade of C or better in [CMPE 2320 or ELEE 2305 or EECE 2305] and a grade of C or better or registration in MATH 3341.	
		3	EECE 3301	Electronics I	C		Grade of C or better in [CMPE 2320 or ELEE 2305 or EECE 2305] and [CMPE 2120 or ELEE 2105 or EECE 2105]	
		1	EECE 3101	Electronics I Lab	C		Grade of C or better in [CMPE 2320 or ELEE 2305 or EECE 2305] and [CMPE 2120 or ELEE 2105 or EECE 2105] and a grade of C or better or registration in [EECE 3301 or ELEE 3301].	
		3	Choose 1	American History		060		See Core Curriculum. Options: HIST 1301 or HIST 2327
	17 Semester Total Hours							

The 2024-2026 list of core courses can be found in the 2024-2026 Undergraduate Catalog: www.utrgv.edu/catalog > See 'Bachelors Degree Program Regulations'

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.

		H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
THIRD YEAR	FALL	2	EECE 3225	Electrical Engineering Lab I	C		Grade of C or better in: [ELEE 2330 or CMPE 2330 or EECE 2306] and [ELEE 2130 or CMPE 2130 or EECE 2106] and [EECE 2319 or CSCI 2380 or CMPE 2380] and a grade of C or better or registration in [ELEE 3321 or CMPE 3322 or EECE 3321] and [CMPE 3403 or ELEE 3301 or EECE 3301].	
		3	EECE 3315	Electromagnetics Engineering			Grade of C or better in [EECE 2305 or ELEE 2305], MATH 2415 and PHYS 2426.	
		4	EECE 3435	Microprocessor Systems	C		Grade of C or better in [ELEE 2330 or CMPE 2330 or EECE 2306] and [CSCI 1370 or CSCI 1381 or CSCI 1470] .	
		3	EECE 4303	Digital Systems Engineering II			Grade of C or better in [ELEE 2330 or CMPE 2330 or EECE 2306].	
		3	Choose 1	American History		060		See Core Curriculum. Options: HIST 1302 or HIST 2328
		15 Semester Total Hours						
	SPRING	2	EECE 3230	Electrical Engineering Lab II	C		[EECE 2319 or ELEE 2319] and [EECE 3225 or ELEE 3225] with a minimum grade of C.	
		3	EECE 3340	Probability and Statistics for Electrical and Computer Engineers	C		Grade of 'C' or better in MATH 2414.	
		3	EECE 3302	Electronics II			Grade of C or better in [EECE 3301 or ELEE 3301] and [EECE 3321 or ELEE 3321].	
		3	EECE 43XX or 33XX	Prescribed Elective				Must be an approved 3000- or 4000-level EECE Prescribed Elective Course. See program of study for approved list.
		3	POLS 2305	U.S. Federal Govt & Politics		070		
	14 Semester Total Hours							
		H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FOURTH YEAR	FALL	3	EECE 4321	Automatic Controls			Grade of C or better in [EECE 3321 or ELEE 3321] and MATH 3341.	
		3	EECE 4328	Solid State Devices			Grade of C or better in [EECE 3301 or ELEE 3301].	
		3	EECE 4351	Communication Theory			Grade of C or better in [EECE 3340 or ELEE 3340] and [EECE 3321 or ELEE 3321].	
		3	EECE 4361	Senior Design I	C		Grade of C or better in [ELEE 3435 or CMPE 3437 or EECE 3435 or CSCI 2333 or CMPE 2333] and [CMPE 3403 or ELEE 3301 or EECE 3301] and [STAT 3337 or CMPE 3343 or ELEE 3340 or EECE 3340 or EECE 3230 or ELEE 3230] and [CMPE 3340 or CSCI 3340 or EECE 3230 or ELEE 3230] and [having finished with a grade of C or better or be enrolled in at least 6 credits of 4000-level EECE coursework].	
		3	PHIL 2326	Ethics, Technology, and Society		040		
		15 Semester Total Hours						
	SPRING	3	EECE 43XX or 33XX	Prescribed Elective				Must be an approved 3000- or 4000-level EECE Prescribed Elective Course. See program of study for approved list.
		3	EECE 43XX or 33XX	Prescribed Elective				Must be an approved 3000- or 4000-level EECE Prescribed Elective Course. See program of study for approved list.
		3	EECE 4362	Senior Design II			Grade of C or better in [EECE 4361 or ELEE 4361] or CMPE 4371 or CMPE 4373.	
		3	POLS 2306	Texas Government & Politics		070		
		3	Choose 1	Integrative/Experiential Learning Option		090		Complete three credit hours from the approved area, except PHIL 2326, in addition to CSCI 1380.
	15 Semester Total Hours							

125 TOTAL HOURS

(42) Advanced minimum credit hours

Revised: Tuesday, February 18th, 2025