

	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.		
		1	EECE 1101	Introduction to Electrical and Computer Engineering	C				
		3	POLS 2305	U.S. Federal Govt & Politics		070			
		3	Choose 1	Integrative and Experiential Learning		090		Complete three credit hours from the approved area, except PHIL 2326, in addition to three science labs.	
			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.	
		<b>14</b>	<b>Semester Total Hours</b>						
FIRST YEAR	SPRING	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	
		4	MATH 2414	Calculus II	C		MATH 2413 with a grade of 'C' or better.		
		4	CSCI 1470	Computer Science I	C		Grade 'C' or better in any of the following: MATH 1314, MATH 1414 or placement in a higher level Math courses (MATH 2412, MATH 2413) and credit for or concurrent enrollment in CSCI 1101 or CMPE 1101 or EECE 1101		
		4	PHYS 2425	Physics for Scientists and Engineers I		030	MATH 2413.	1 hour (lab) applied to Core 090. See Core Curriculum for details.	
				<b>15</b>	<b>Semester Total Hours</b>				
	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes		
SECOND YEAR	FALL	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.		
		1	EECE 2146	Practicum of Mathematics for Electrical and Computer Engineering	C		Grade of C or better or registration in Math 2346.		
		3	CSCI 2380	Computer Science II	C		Grade of C or better in: CSCI 1470 or CSCI 1390 or [ CSCI 1370 or CMPE 1370] and [CSCI 1170 or CMPE 1170] .		
		3	Choose 1	Social and Behavioral Sciences		080		See Core Curriculum for course options.	
		3	Choose 1	American History		060		See Core Curriculum. Options: HIST 1301 or HIST 2327	
		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].		
			<b>17</b>	<b>Semester Total Hours</b>					
	SECOND YEAR	SPRING	3	CSCI 3333	Algorithms and Data Structures	C		Grade of C or better in: [CSCI 3310 or MATH 2346 or MATH 2305] and [CSCI 2380 or CMPE 2380].	
			4	PHYS 2426	Physics for Scientists and Engineers II		030	PHYS 2425 and MATH 2414.	1 hour (lab) applied to Core 090. See Core Curriculum for details.
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			POLS 2306	Texas Government & Politics		070			
3			CHEM 1309	Chemistry for Engineers	C		Minimum grade of C is required in one of the following courses: MATH 1314, MATH 1414, MATH 2412, MATH 2413 or MATH 2487.		
1	CHEM 1109	Chemistry for Engineers Lab		090	Credit/registration in CHEM 1309	1 hour (lab) applied to Core 090.			
		<b>18</b>	<b>Semester Total Hours</b>						

CORE: The 2024-2026 list of core courses can be found in the 2024-2026 Undergraduate Catalog: [www.utrgv.edu/catalog](http://www.utrgv.edu/catalog) > See 'Core Curriculum'

**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	3	CSCI 3340	Software Engineering I	C	Grade of C or better in: [3 advanced hours in CSCI or CMPE or EECE] and [CSCI 2380 or CMPE 2380].	
		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 1380 or CSCI 1387 or CSCI 1470].	
		3	MATH 3341	Differential Equations	C	MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
		3	CSCI 3334	Systems Programming	C	Grade of C or better in: [CSCI 2380 or CMPE 2380] and [CSCI 2333 or CMPE 2333 or ELEE 3435 or CMPE 3437 or EECE 3435].	
		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]	
<b>Semester Total Hours</b>							
THIRD YEAR	SPRING	3	EECE 3331	Microcontroller and Embedded Systems Lab	C	Grade of C or better in [CMPE 3437 or ELEE 3435 or EECE 3435] or CSCI 2333 or CMPE 2333.	
		3	PHIL 2326	Ethics, Technology, and Society		040	
		3	Choose 1	Prescribed Elective from Approved List	C	Prerequisites differ between course options	EECE 3225, EECE 3321, EECE 4375, EECE 4390, [only one from CSCI 3326, CSCI 3328, or CSCI 3329], CSCI 3341, or CSCI 4333
		3	Choose 1	Prescribed Elective from Approved List	C	Prerequisites differ between course options	EECE 3225, EECE 3321, EECE 4375, EECE 4390, [only one from CSCI 3326, CSCI 3328, or CSCI 3329], CSCI 3341, or CSCI 4333
		3	EECE 3340	Probability and Statistics for Electrical and Computer Engineers	C	Grade of C or better in MATH 2414.	
		3	EECE 4303	Digital Systems Engineering II	C	Grade of C or better in [ELEE 2330 or CMPE 2330 or EECE 2306].	
<b>Semester Total Hours</b>							
FOURTH YEAR	FALL	3	EECE 4380	Computer Architecture	C	Grade of C or better in [ELEE 3435 or CMPE 3437 or EECE 3435 or CSCI 2333 or CMPE 2333] and [ELEE 4303 or EECE 4303 or CMPE 4303].	
		3	Choose 1	American History		060	See Core Curriculum. Options: HIST 1302 or HIST 2328
		3	Choose 1	Prescribed Elective - Advanced EECE or CSCI	C		Any EECE/CSCI 4000-level course not used to satisfy any other requirement and not equivalent or similar to any other course satisfying any requirement. Must be approved by faculty adviser.
		3	Choose 1	Prescribed Elective from Approved List	C	Prerequisites differ between course options	EECE 3225, EECE 3321, EECE 4375, EECE 4390, [only one from CSCI 3326, CSCI 3328, or CSCI 3329], CSCI 3341, or CSCI 4333
		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].	
		<b>Semester Total Hours</b>					
FOURTH YEAR	SPRING	3	Choose 1	Creative Arts		050	See Core Curriculum for course options.
		2	Choose 1	Prescribed Elective from Approved List	C	Prerequisites differ between course options	EECE 3225, EECE 3321, EECE 4375, EECE 4390, [only one from CSCI 3326, CSCI 3328, or CSCI 3329], CSCI 3341, or CSCI 4333
		3	CSCI 4334	Operating Systems	C	Grade of C or better in: [CSCI 2380 or CMPE 2380] and [CSCI 2333 or CMPE 2333 or ELEE 3435 or CMPE 3437 or EECE 3435].	
		3	Choose 1	Prescribed Elective - Advanced EECE or CSCI	C		Any EECE/CSCI 4000-level course not used to satisfy any other requirement and not equivalent or similar to any other course satisfying any requirement. Must be approved by faculty adviser.
		3	EECE 4362	Senior Design II	C	Grade of C or better in [EECE 4361 or ELEE 4361] or CMPE 4371 or CMPE 4373.	
<b>Semester Total Hours</b>							

127 TOTAL HOURS  
(42) Advanced minimum credit hours

Revised: Thursday, August 29th, 2024