

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
FIRST YEAR	FALL		3	Choose 1	Communication (Core)	C	010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade of "C" or better in ENGL 1301/1387.	See General Education Core for more details Options: ENGL 1301 or ENGL 1305 or ENGL 1387 (H)	
			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 1380	Computer Science I (Core)	C	090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.	Either CSCI 1380 or CSCI 1370 can be taken.	
			1	ELEE 1101	Introduction to Electrical Engineering					
			3	Choose 1	Social and Behavioral Sciences (Core)		080		See General Education Core for course options.	
					UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
				<b>14 Semester Total Hours</b>						
FIRST YEAR	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 1380 (or CSCI 1387) or CMPE 1170/1370 (or CMPE 1378/1178) 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 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).	1 hour of lab to count for 090 Core	
			3	ELEE 2330	Digital Systems Engineering I	C				
			1	ELEE 2130	Digital Systems Engineering I Lab	C		Credit/registration in ELEE 2330.		
				<b>15 Semester Total Hours</b>						
FIRST YEAR			3	Choose 1	Communication (Core)	C	010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade of "C" or better in ENGL 1301/1387.	See General Education Core for more details Options: ENGL 1302 or ENGL 1388 (H) or ENGL 1305	
			3	Choose 1	Creative Arts (Core)		050		See General Education Core Curriculum	
						<b>6 Semester Total Hours</b>				
SECOND YEAR	FALL		3	MATH 3341	Differential Equations	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.		
			4	PHYS 2426	Physics for Scientists and Engineers II	C	030	PHYS 2425.	1 hour of lab to count for 090 Core	
			3	ELEE 2305	Electric Circuits I	C		MATH 2414 (or MATH 2488) and credit/registration in PHYS 2426.		
			1	ELEE 2105	Electric Circuits I Lab			Credit/registration in ELEE 2305.		
			3	ELEE 2319	Numerical Computation and Data Visualization	C		CSCI 1380 (or CSCI 1387) and credit/registration in MATH 2346.		
					<b>14 Semester Total Hours</b>					
	SECOND YEAR	SPRING		4	MATH 2415	Calculus III	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
				3	MECE 2301 or CHEM 1311 or CHEM 1309	Statics or General Chemistry I or Chemistry for Engineers			Prerequisite for CHEM: MATH 1314/1414	Prerequisite for MECE 2301 Statics: A grade of 'C' or better in MECE 1101 and PHYS 2425, and credit/registration in MATH 2414 (or MATH 2488).
				3	ELEE 3321	Signals and Systems	C		ELEE 2305 and credit/registration in MATH 3341.	
				3	ELEE 3301	Electronics I	C		ELEE 2305 and credit/registration in ELEE 3321.	
				1	ELEE 3101	Electronics I Lab			Credit/registration in ELEE 3301.	
		3	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1301 or HIST 1387 or HIST/MASC 2327		
					<b>17 Semester Total Hours</b>					

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
THIRD YEAR	FALL	2		ELEE 3225	Electrical Engineering Lab I	C		ELEE 2330 and ELEE 2130, plus credit or registration for ELEE 3301, ELEE 3321, and ELEE 2319.		
		3		ELEE 3315	Electromagnetics Engineering			ELEE 2305, MATH 2415 and PHYS 2426.		
		4		ELEE 3435	Microprocessor Systems	C		ELEE 2330 and CSCI 1380 (or CSCI 1387).		
		3		ELEE 4303	Digital Systems Engineering II			ELEE 2330.		
		3		Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1302 or HIST 1388 or HIST/MASC 2328	
	<b>15 Semester Total Hours</b>									
	SPRING	2		ELEE 3230	Electrical Engineering II Lab	C		ELEE 3225.		
		3		ELEE 3340	Probability and Statistics for Electrical Engineers	C		MATH 2414		
		3		ELEE 3302	Electronics II			ELEE 3301 and ELEE 3321.		
		3		ELEE X3XX	Technical Elective				Must be a 3000 or 4000 level ELEE Technical Elective Course.	
3			Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)		
<b>14 Semester Total Hours</b>										
FOURTH YEAR	FALL	3		ELEE 4321	Automatic Control Systems			ELEE 3321 and MATH 3341.		
		3		ELEE 4328	Solid State Electronic Devices			ELEE 3301.		
		3		ELEE 4351	Communication Theory			ELEE 3340 and ELEE 3321.		
		3		ELEE 4361	Senior Design I	C		ELEE 3230 ELEE 3435, and credit/registration in at least 9 credits of 4000 level ELEE coursework.		
		3		PHIL 2326	Ethics, Technology, and Society (Core)		040			
	<b>15 Semester Total Hours</b>									
	SPRING	3		ELEE X3XX	Technical Elective				Must be a 3000 or 4000 level ELEE Technical Elective	
		3		ELEE X3XX	Technical Elective				Must be a 3000 or 4000 level ELEE Technical Elective	
		3		ELEE 4362	Senior Design II			ELEE 4361.		
		3		Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)	
3			Choose 1	Integrative/Experiential Learning Option (Core)		090		Choose any course from Humanities (040 Language, Philosophy & Culture) except PHIL courses.		
<b>15 Semester Total Hours</b>										

### Graduation Requirements

Progression requirements: Students must receive a grade of 'C' or better in all courses that are prerequisites or corequisites for electrical engineering courses.

**CORE: The 2019-2020 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

**Critical (!):** sequence sensitive course.

**Minimum Grade:** A - Excellent; B - Good; C - Satisfactory; D - Below Average;

CR - Credit; P - Passing; S - Satisfactory.

**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.

**125 TOTAL HOURS**

**(54) TOTAL ADVANCED HOURS**

Approved: Wednesday, March 27, 2019

Revised: Friday, May 10, 2019