

	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: <u>ENGL 1301</u> 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.	
		1	CSCI 1101	Introduction to Computer Science	C			
		3	CSCI 1370	Engineering Computer Science I	C		Grade of 'C' or better in MATH 1314 or placement in a higher level Math course. Co-requisite: CSCI 1170 (or CSCI 1178).	
		1	CSCI 1170	Engineering Computer Science I Laboratory	C		Corequisite: CSCI 1370 (or CSCI 1378).	
			UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
	<b>12 Semester Total Hours</b>							
	SPRING	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.	(H) designates Honors sections of courses.
		4	MATH 2414	Calculus II			MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
		4	Choose 1	Life and Physical Sciences (Core)		030		MUST BIOL 1406 or BIOL 2401 or CHEM 1311 or PHYS 1401 or PHYS 2425
		3	Choose 1	American History (Core)		060		HIST 1301 OR HIST 1387 OR HIST/MASC 2327
		3	CSCI 2380	Computer Science II	C		CSCI 1370 (or CSCI 1378) or CSCI 1380 (or CSCI 1387) or consent of instructor.	OR CSCI 2388
	<b>17 Semester Total Hours</b>							
SECOND YEAR	FALL	3	COMM 1315	Public Speaking		090		
		4	Choose 1	Life and Physical Sciences		030		MUST be BIOL 1407 or BIOL 2402 or CHEM 1312 or PHYS 1402 or PHYS 2426 to pair with previously taken 030 course
		3	CSCI 2344	Programming in Unix/ Linux Environment	C		CSCI 1370 (or CSCI 1378) or CSCI 1380 (or CSCI 1387) or consent of instructor.	
		3	CSCI 2333	Computer Organization and Assembly Language	C		CSCI 1370 (or CSCI 1378) or CSCI 1380 (or CSCI 1387) or consent of instructor.	
		<b>13 Semester Total Hours</b>						
	SPRING	3	PHIL 2326	Ethics, Technology and Society		040		
		3	CSCI 3310	Mathematical Foundations of Computer Science	C		MATH 2413 with grade of 'C' or better; and CSCI 1370 (or CSCI 1378).	
		4	Choose 1	Basic Science (Support Course)				Choose one course not completed in the Genral Education Core: BIOL 1406 or BIOL 2401 or CHEM 1311 or PHYS 1401 or PHYS 2425
		3	Choose 1	Object Oriented Programming, Java or Visual Basic or Object Oriented Programming in C#	C		CSCI 1370 (or CSCI 1378) or CSCI 1380 (or CSCI 1387) or consent of instructor.	CSCI 3326 OR CSCI 3327 OR CSCI 3328
		3	ELEE 2330	Digital Systems Engineering I			Corequisite: ELEE 2130	MATH 2413 recommended (not required)
		1	ELEE 2130	Digital Systems Engineering I Lab			Corequisite: ELEE 2330	MATH 2413 recommended (not required)
	<b>17 Semester Total Hours</b>							

#### 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..

**Language Proficiency Requirement:** Student is required to demonstrate language proficiency in a language other than English at the undergraduate level equivalent to a minimum of six credits.

THIRD YEAR			!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	FALL		3	CSCI X3XX	CSCI Advanced Technical Elective					See degree plan for options.
			3	CSCI 3333	Algorithms and Data Structures		c		CSCI 2380 (or CSCI 2388); and credit/registration for MATH 2346 or CSCI 3310 or MATH 2305.	
			3	Choose 1	Advanced Free Elective					
			3	ENGL 3342	Technical Communication				6 hours of English.	
			3	POLS 2305 or POLS 2385 (H)	U.S. Federal Government & Politics or (H)			070		(H) designates Honors sections of courses.
	15 Semester Total Hours									
SPRING		3	CSCI 3340	Software Engineering I		c		CSCI 2380 (or CSCI 2388), and 3 advanced hours in CSCI courses.		
		3	Choose 1	CS Electives - Databases, Networking, and Operating Systems		c		CSCI 3333 for Databases; CSCI 2380 and CSCI 2333 for Networking, Architecture, and OS	Choose from: CSCI 4333 Database Design and Implementation or CSCI 4334 Operating Systems or CSCI 4335 Computer Architecture or CSCI 4345 Computer Networks	
		3	MATH 2318	Linear Algebra				MATH 2413 (or MATH 2487) with a grade of 'C' or better.		
		3	POLS 2306 or POLS 2386 (H)	Texas Government & Politics			070		(H) designates Honors sections of courses.	
		3	CSCI 3336	Organization of Programming Languages		c		CSCI 2380 (or CSCI 2388).		
15 Semester Total Hours										
FOURTH YEAR			!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	FALL		3	Choose 1	CS Electives - Databases, Networking, and Operating Systems		c		CSCI 3333 for Databases; CSCI 2380 and CSCI 2333 for Networking, Architecture, and OS	Choose from: CSCI 4333 Database Design and Implementation or CSCI 4334 Operating Systems or CSCI 4335 Computer Architecture or CSCI 4345 Computer Networks
			3	CSCI 4325	Automata, Formal Languages, and Computability		c		CSCI 3333.	
			3	CSCI X3XX	CSCI Advanced Technical Elective					See degree plan for options.
			2	Choose 1	Free Elective - Any Level					
			3	Choose 1	Support Courses - Probability					STAT 3337 OR ELEE 3340 OR STAT 3301
			3	Choose 1	Creative Arts			050		See General Education Core for course options.
	17 Semester Total Hours									
	SPRING		3	CSCI X3XX	CSCI Advanced Technical Elective					See degree plan for options.
			3	Choose 1	Advanced Free Elective					
			3	Choose 1	American History (Core)			060		HIST 1302 OR HIST 1388 OR HIST/MASC 2328
			3	Choose 1	Social and Behavioral Sciences (Core)			080		See General Education Core for course options.
		3	Choose 1	Free Elective - Any Level						
		3	CSCI 4390	Senior Project				CSCI 3340 or consent of instructor		
18 Semester Total Hours										

#### Graduation Requirements

All courses in the Computer Science Core must be completed with a grade 'C' or better. All courses in Section 2a-Programming Language and 2b-Databases, Networking, and Operating Systems must be completed with a grade of 'C' or better. In addition to the graduation requirements listed in the UTRGV 2018-2019 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

**124 TOTAL HOURS**

**(48) TOTAL ADVANCED HOURS**

Approved: Wednesday, April 4, 2018

Revised: Wednesday, March 28, 2018

**CORE: The 2018-2019 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)**