

		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 English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more 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	CSCI 1101		Introduction to Computer Science	C				
		3	CSCI 1370		Computer Science I for Majors	C		Grade of 'C' or better in any of the following: MATH 1314, MATH 1414 or placement in a higher level Math course (MATH 2412, MATH 2413) and credit for or concurrent enrollment in CSCI 1101 or CMPE 1101. Co-requisite: CSCI 1170.		
		1	CSCI 1170		Computer Science I Laboratory for Majors	C		Co-requisite: CSCI 1370.		
			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>12 Semester Total Hours</b>										
FIRST YEAR	SPRING	3		Choose 1	Communication (Core)	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 General Education Core for more details Options: ENGL 1302 or ENGL 1305	
		4	MATH 2414		Calculus II			MATH 2413 with a grade of 'C' or better.		
		3	Choose 1		American History (Core)		060		HIST 1301 OR HIST/MASC 2327	
		3	CSCI 2380		Computer Science II	C		Grade of C or better in: [CSCI 1370 or CMPE 1370] and [CSCI 1170 or CMPE 1170].	OR CSCI 2388	
<b>13 Semester Total Hours</b>										
		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
SECOND YEAR	FALL	3		COMM 1315	Public Speaking		090			
		4		Choose 1	Life and Physical Sciences (Core)		030		MUST be BIOL 1406 or BIOL 2401 or CHEM 1311 or CHEM 1309 or PHYS 1401 or PHYS 2425	
		3	CSCI 2344		Programming in Unix/ Linux Environment	C		Grade of C or better in: [CSCI 1370 or CSCI 1378 or CMPE 1370 or CMPE 1378] and [CSCI 1170 or CSCI 1178 or CMPE 1170 or CMPE 1178].		
		3	Choose 1		Object Oriented Programming, Java or Visual Basic or Object Oriented Programming in C#	C		Grade of C or better in: [CSCI 1370 or CSCI 1378 or CMPE 1370 or CMPE 1378] and [CSCI 1170 or CSCI 1178 or CMPE 1170 or CMPE 1178].	CSCI 3326 OR CSCI 3327 OR CSCI 3328 OR CSCI 3329	
	3	CSCI 2333		Computer Organization and Assembly Language	C		Grade of C or better in: [CSCI 1370 or CMPE 1370] and [CSCI 1170 or CMPE 1170].			
	<b>16 Semester Total Hours</b>									
	SECOND YEAR	SPRING	3		PHIL 2326	Ethics, Technology and Society (Core)		040		
3			CSCI 3310		Mathematical Foundations of Computer Science	C		Grade of C or better in: [MATH 2413 or MATH 2487] and [CSCI 1370 or CMPE 1370 or CSCI 1378 or CMPE 1378] and [CSCI 1170 or CSCI 1178 or CMPE 1170 or CMPE 1178].		
4				Choose 1	Life and Physical Sciences (Core)		030		MUST choose from BIOL, CHEM, or PHYS. See degree plan for options. Prerequisite may apply.	
3				Choose 1	Free Elective - Any Level					
3			ELEE 2330		Digital Systems Engineering I			Credit/registration in CMPE 1101, ELEE 1101, or CSCI 1101.	MATH 2413 recommended (not required)	
1	ELEE 2130		Digital Systems Engineering I Lab			Credit/registration in ELEE 2330.	MATH 2413 recommended (not required)			
<b>17 Semester Total Hours</b>										

		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
THIRD YEAR	FALL	3		CSCI X3XX	CSCI Additional Computer Science Elective				See degree plan for options.
		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].	
		3		Choose 1	Free Elective - Any Level				
		3		ENGL 3342	Technical Communication			6 hours of English.	
		3		POLS 2305	U.S. Federal Govt & Politics			070	
		<b>15 Semester Total Hours</b>							
THIRD YEAR	SPRING	3		CSCI 3340	Software Engineering I	C		Grade of C or better in: [3 advanced hours in CSCI or CMPE] and [CSCI 2380 or CMPE 2380].	
		3		Choose 1	CS Electives - Databases, Networking, Operating Systems and Computer Architecture	C		CSCI 3333 for Databases; CSCI 2380 or CSCI 2388 or CMPE 2380 or CMPE 2388 and CSCI 2333 or CMPE 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 with a grade of 'C' or better.	
		3		POLS 2306	Texas Government & Politics			070	
		3		CSCI 3336	Organization of Programming Language	C		Grade of C or better in: [CSCI 2380 or CMPE 2380] and [CSCI 3326 or CMPE 3326 or CSCI 3327 or CMPE 3327 or CSCI 3328 or CMPE 3328 or CSCI 3329].	
		<b>15 Semester Total Hours</b>							
		I	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FOURTH YEAR	FALL	3		Choose 1	CS Electives - Databases, Networking, Operating Systems, and Computer Architecture	C		CSCI 3333 for Databases; CSCI 2380 or CSCI 2388 or CMPE 2380 or CMPE 2388 and CSCI 2333 or CMPE 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		Grade of C or better in: CSCI 3333 or CMPE 3333.	
		3		CSCI X3XX	CSCI Additional Computer Science Elective				See degree plan for options.
		1		Choose 1	Integrative/Experimental Learning (Core)			090	Choose an additional 1-hour course from this category except PHIL 2326.
	1		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 (Core)			050	See General Education Core for course options.	
			<b>17 Semester Total Hours</b>						
FOURTH YEAR	SPRING	3		CSCI X3XX	CSCI Additional Computer Science Elective				See degree plan for options.
		3		Choose 1	Free Elective - Any Level				
		3		Choose 1	American History (Core)			060	HIST 1302 OR HIST/MASC 2328
		3		Choose 1	Social and Behavioral Sciences (Core)			080	See General Education Core for course options.
		3		CSCI 4390	Senior Project	C		Grade of C or better in CSCI 3340 or CMPE 3340 and consent of instructor	
		<b>15 Semester Total Hours</b>							

### Graduation Requirements

All courses in the Computer Science Core must be completed with a grade 'C' or better. All courses in Sections Programming Language and Databases, Architecture, Networking, and Operating Systems must be completed with a grade of 'C' or better.

**CORE: The 2021-2022 list of core courses can be found in the 2021-2022 Undergraduate Catalog: [www.utrgv.edu/catalog](http://www.utrgv.edu/catalog) > See 'Core Curriculum'**

Symbols Key	
<b>Critical (!):</b> sequence sensitive course.	<b>General Education Core (GEC) Sections:</b> 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.
<b>Minimum Grade:</b> A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.	

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