Bachelor of Science Computer Science
Computer Science

2024-2026

FIRST YEAR

FALL

H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
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 General Education Core for options.
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			
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	
	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. May apply as free elective.

12 Semester Total Hours

SPRING

H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
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 General Education Core for options.
4	MATH 2414	Calculus II			MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
3	Choose 1	American History		060		HIST 1301 or HIST 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 1470 or CSCI 1390.	

13 Semester Total Hours

SECOND YEAR

FALL

H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
3	COMM 1315	Public Speaking		090		
4	Choose 1	Life and Physical Sciences		030	Pre-requisites vary	Choose one from: BIOL 1406, BIOL 1407, BIOL 2401, BIOL 2402, only one from either CHEM 1311 or CHEM 1309, CHEM 1312, only one from either PHYS 1401 or PHYS 2425, only one from either PHYS 1402 or PHYS 2426
3	CSCI 2344	Programming in Unix/ Linux Environment	C		Grade of C or better in: CSCI 1470 or CSCI 1390 or [[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 in Java or Object-Oriented Programing Object Oriented Programming in C# or Object Oriented Programming in Python	C		Grade of C or better in: [[CSCI 1370 or CMPE 1370] and [CSCI 1170 or CMPE 1170]] or CSCI 1470 or CSCI 1390.	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 1470 or CSCI 1390 or [[CSCI 1370 or CMPE 1370] and [CSCI 1170 or CMPE 1170]].	

16 Semester Total Hours

SPRING

H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
3	PHIL 2326	Ethics, Technology and Society		040		
3	CSCI 3310	Mathematical Foundations of Computer Science	C		Grade of C or better in: [MATH 2413 or MATH2487] and [CSCI 1470 or CSCI 1390 or [[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		030	Pre-requisites vary	Choose second course from: BIOL 1406, BIOL 1407, BIOL 2401, BIOL 2402, only one from either CHEM 1311 or CHEM 1309, CHEM 1312, only one from either PHYS 1401 or PHYS 2425, only one from either PHYS 1402 or PHYS 2426
3	Choose 1	Free Elective - Any Level				
3	EECE 2306	Digital Systems Engineering I			Grade of C or better or registration in CMPE 1101 or ELEE 1101 or CSCI 1101 or EECE 1101.	MATH 2413 recommended (not required)
1	EECE 2106	Digital Systems Engineering I Lab			Grade of C or better or registration in [CMPE 2330 or ELEE 2330 or EECE 2306].	MATH 2413 recommended (not required)

17 Semester Total Hours

CORE: The 2024-2026 list of core courses can be found in the 2024-2026 Undergraduate Catalog: 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.

THIRD YEAR

FALL

H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
3	CSCI 33XX or CSCI 43XX	Computer Science Advanced Elective			Pre-requisites vary	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	CSCI 3336	Organization of Programming Languages	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].	
3	ENGL 3342	Technical Communication			6 hours of English.	
3	POLS 2305	U.S. Federal Govt & Politics		070		

15 Semester Total Hours

SPRING

H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
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].	
3	Choose 1	Computer Science Prescribed Elective - Databases, Architecture, Networking, and Operating Systems	C		CSCI 3333 for Databases; [CSCI 2380 or CMPE 2380] and [CSCI 2333 or CMPE 2333 or ELEE 3435 or CMPE 3437 or EECE 3435] for Architecture, Networking, and Operating Systems	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	Texas Government & Politics		070		
3	Choose 1	Free Elective - Any Level				

15 Semester Total Hours

FOURTH YEAR

FALL

H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
3	Choose 1	Computer Science Prescribed Elective - Databases, Architecture, Networking, and Operating Systems	C		CSCI 3333 for Databases; [CSCI 2380 or CMPE 2380] and [CSCI 2333 or CMPE 2333 or ELEE 3435 or CMPE 3437 or EECE 3435] for Architecture, Networking, and Operating Systems	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 33XX or CSCI 43XX	Computer Science Advanced Elective			Pre-requisites vary	See degree plan for options.
1	Choose 1	Integrative/Experiential Learning		090		Choose an additional 1-hour course from this category except PHIL 2326
1	Choose 1	Free Elective - Any Level				
3	Choose 1	Support Course - Statistics				STAT 3337 or STAT 3301 or EECE 3340
3	Choose 1	Creative Arts		050		See General Education Core for course options.

17 Semester Total Hours

SPRING

H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
3	CSCI 33XX or CSCI 43XX	Computer Science Advanced Elective			Pre-requisites vary	See degree plan for options.
3	Choose 1	Free Elective - Any Level				
3	Choose 1	American History		060		HIST 1302 or HIST 2328
3	Choose 1	Social and Behavioral Sciences		080		See General Education Core for course options.
3	CSCI 4390	Senior Project			Grade of C or better in: [CSCI 3340 or CMPE 3340] and consent of instructor.	

15 Semester Total Hours

120 TOTAL HOURS

(42) Advanced minimum credit hours

Revised: Thursday, August 29th, 2024