The University of Texas Rio Grande Valley

Bachelor of Science (BS) Computer Science

2017-2018

Degree Plan Tentative Pending University Approval

		!	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 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				
			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			Corequisite: CSCI 1370 (or CSCI 1378).	
				UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
			12	**Semester Total Hours**					
	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 be BIOL, CHEM, PHYS
			3	Choose 1	American History (Core)		060		HIST 1301 OR HIST 1387 OR HIST/MASC 2327
			3	CSCI 2380	Computer Science II			CSCI 1370 (or CSCI 1378) or CSCI 1380 (or CSCI 1387) or consent of instructor.	OR CSCI 2388
			17	**Semester Total Hours**					

		!	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		030		MUST be BIOL, CHEM, PHYS to pair with previously taken 030 course
			3	CSCI 2344	Programming in Unix/ Linux Environment			CSCI 1370 (or CSCI 1378) or CSCI 1380 (or CSCI 1387) or consent of instructor.	
			3	CSCI 2333	Computer Organization and Assembly Language			CSCI 1370 (or CSCI 1378) or CSCI 1380 (or CSCI 1387) or consent of instructor.	
			13	**Semester Total Hours**					
	SPRING		3	CSCI 3334	Systems Programming			CSCI 2380; and CSCI 2333, ELEE 3435.	
			3	CSCI 3310	Mathematical Foundations of Computer Science			MATH 2413 with grade of 'C' or better; and CSCI 1370 (or CSCI 1378).	
			4	Choose 1	Basic Science (Support Course)				Must be PHYS, CHEM, or BIOL from degree plan Section C (support courses) Basic Sciences
			3	CSCI 3326 or 3327 or 3328	Object Oriented Programming, Java or Visual Basic or Object Oriented Programming in C#				CSCI 3326 OR CSCI 3327 OR CSCI 3328
			3	ELEE 2330	Digital Systems Engineering I			Corequisite: ELEE 2130	
			1	ELEE 2130	Digital Systems Engineering I Lab			Corequisite: ELEE 2330	
			17	Semester Total Hours					

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 - Computer Application; 090 - Interdisciplinary ;090 - Science Labs; 090 - Wellness.

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.

		!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
THIRD YEAR	FALL		3	PHIL 2326	Ethics, Technology and Society		040		
			3	CSCI 3333	Algorithms and Data Structures			CSCI 2380 (or CSCI 2388); and credit/registration for MATH 2346 or CSCI 3310 or MATH 2305.	
			3	Choose 1	Advanced 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			CSCI 2380 (or CSCI 2388), and 3 advanced hours in CSCI courses.	
			3	Choose 1	CS Electives - Databases, Networking, Operating Systems and Computer Architecture			CSCI 3333 for Databases; CSCI 2380 for Networking; CSCI 2380 for Architecture; CSCI 3334 for 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 or (H)		070		(H) designates Honors sections of courses.
			3	CSCI 3336	Organization of Programming Languages			CSCI 2380 (or CSCI 2388).	Programming experience in two high level languages
			15	**Semester Total Hours**					

		!	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			CSCI 3333 for Databases; CSCI 2380 for Networking; CSCI 2380 for Architecture; CSCI 3334 for 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			CSCI 3333.	
			3	CSCI X3XX	CSCI Advanced Technical Elective				See degree plan for options.
			2	Choose 1	Elective - Any Level				
			3	Choose 1	Support Courses - Probability				STAT 4337 OR ELEE 3340 OR STAT 3331
			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 Elective				
			3	Choose 1	American History (Core)				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	Elective - Any Level				
			3	CSCI 4390	Senior Project			CSCI 3340.	
			18	**Semester Total Hours**					

Graduation Requirements

Progression requirements: Students must receive a grade of 'C' or better in all courses that are prerequisites for civil engineering courses. Graduation requirements: 1. Students must receive a grade of 'C' or better in all civil engineering courses. 2. In addition to the graduation requirements listed in the UTRGV 2015-2017 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:
Revised: Wednesday, June 21, 2017

CORE: The 2017-2018 list of core courses can be found at: www.utrgv.edu > Academics > Undergraduate > General Education Core
www.utrgv.edu/core