FIRST YEAR

FALL

!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	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 (Core)	C	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	See General Education Core for more details.
	1	CMPE 1101	Introduction to Computer Engineering	C			
	3	Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)
	3	Choose 1	Integrative and Experiential Learning (Core)		090		Choose any course from Humanities (040 Language, Philosophy & Culture) except Professional Ethics
		UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
14 Semester Total Hours							

SPRING

!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	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.
	4	MATH 2414	Calculus II	C		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	3	CMPE 1370	Engineering Computer Science I	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). Co-requisite: CMPE/CSCI 1101 and [CSCI/CMPE 1170 or CSCI/CMPE 1178)].	
	1	CMPE 1170	Engineering Computer Science I Lab	C		Co-requisites: One of the following: CMPE 1370, CSCI 1370, CMPE 1378, CSCI 1378.	
	4	PHYS 2425	Physics for Scientists and Engineers I (Core)		030	MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).	1 hour of lab for Core 090. See General Education Core for more details.
15 Semester Total Hours							

SECOND YEAR

FALL

!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	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.	
	3	CMPE 2380	Computer Science II	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].	OR CSCI 2380.
	3	Choose 1	Social and Behavioral Sciences (Core)		080		See General Education Core for course options.
	3	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1301 or HIST 1387 or HIST/MASC 2327
	3	CMPE 2330	Digital Systems Engineering I	C			
	1	CMPE 2130	Digital Systems Engineering I Lab	C		Credit/registration for CMPE/ELEE 2330.	
16 Semester Total Hours							

SPRING

!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	CMPE 3333	Algorithms and Data Structures	C		Grade of C or better in: [CSCI 3310 or MATH 2346 or MATH 2305] and [CSCI 2380 or CSCI 2388 or CMPE 2380 or CMPE 2388].	
	4	PHYS 2426	Physics for Scientists and Engineers II (Core)		030	PHYS 2425.	1 hour of lab for Core 090. See General Education Core for more details.
	3	CMPE 2320	Electric Circuits I	C		MATH 2414 (or MATH 2488) and credit/registration for PHYS 2426.	
	1	CMPE 2120	Electric Circuits I Lab	C		Credit/registration for CMPE 2320 or ELEE 2305.	
	3	Choose 1	Government/Political Science (Core)		070		Options: POLS 2306 or POLS 2386 (H)
	3	CHEM 1309	Chemistry for Engineers			MATH 1314, MATH 1414, MATH 2412, MATH 2413 or MATH 2487 with a grade of "C" or higher	OR CHEM 1311
	1	CHEM 1109	Chemistry for Engineers Lab (Core)		090	Credit/registration in CHEM 1309	OR CHEM 1111
18 Semester Total Hours							

THIRD YEAR

FALL

!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	CMPE 3340	Software Engineering I	C		3 advanced hours in CSCI (or CMPE equivalent); and CSCI/CMPE 2380 (or CSCI/CMPE 2388).	
	3	Choose 1	Microprocessor Systems (CMPE 3437) or Comp. Org. and System (CMPE 2333)	C		For CMPE 3437: CMPE/ELEE 2330; and CMPE/CSCI 1370 (or CMPE/CSCI 1378). For CMPE 2333: 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].	Select either CMPE 3437 (4 hours) or CMPE 2333 (3 hours)
	3	MATH 3341	Differential Equations	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better	
	3	CMPE 3334	Systems Programming	C		Grade of C or better in: [CSCI 2380 or CSCI 2388 or CMPE 2380 or CMPE 2388] and [CSCI 2333 or CMPE 2333 or ELEE 3435 or CMPE 3437].	
	4	CMPE 3403	Electronics for Computer Engineering	C		CMPE 2320 or ELEE 2305 and CMPE 2330 or ELEE 2330 with a grade of C or better.	
16 Semester Total Hours							

SPRING

!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	CMPE 3331	Microcontroller and Embedded Systems Lab	C		CMPE 3437 or ELEE 3435.	OR CMPE 3341 OR CMPE 4333.
	3	PHIL 2326	Ethics, Technology, and Society (Core)		040		
	3	Choose 1	General Concentration	C			See Degree Plan for courses. Choose 1 from the 7 courses displayed
	3	Choose 1	General Concentration	C			See Degree Plan for courses. Choose 1 from the 7 courses displayed
	3	CMPE 4335	Computer Architecture	C		Grade of C or better in: [CSCI 2333 or CMPE 2333] and [CSCI 2380 or CSCI 2388 or CMPE 2380 or CMPE 2388].	
	3	CMPE 4303	Digital Systems Engineering II	C		CMPE/ELEE 2330 or consent of instructor.	
18 Semester Total Hours							

FOURTH YEAR

FALL

!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	STAT 3337	Probability and Statistics	C		MATH 2414 (OR math 2488) with a grade of 'C' or better.	
	3	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1302 or HIST 1388 or HIST/MASC 2328.
	3	Choose 1	Technical Elective				See Degree for course options. 5 hours required - may take one (2) credit and one (3) credit technical elective.
	3	Choose 1	Communication Network (CMPE 4390) or Computer Networks (CMPE 4345)	C		For CMPE 4390: CMPE 3437 or ELEE 3435. For CMPE 4345: Grade of C or better in: [CSCI 2333 or CMPE 2333] and [CSCI 2380 or CSCI 2388 or CMPE 2380 or CMPE 2388].	
	3	Choose 1	Senior Design I (CMPE 4371 or 4373)	C		Consent of instructor and either CSCI 3340 or CMPE 3340	
15 Semester Total Hours							

SPRING

!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
	3	Choose 1	General Concentration	C			See Degree Plan for courses. Choose 1 from the 7 courses displayed
	3	CMPE 4334	Operating Systems	C		Grade of C or better in: [CSCI 2333 or CMPE 2333] and [CSCI 2380 or CSCI 2388 or CMPE 2380 or CMPE 2388].	
	2	Choose 1	Technical Elective				See Degree for course options. 5 hours required - may take one (2) credit and one (3) credit technical elective.
	3	Choose 1	Senior Design II (CMPE 4372 or 4374)	C		CMPE 4371 or CMPE 4373	
14 Semester Total Hours							

Graduation Requirements

As part of the degree, all students must complete a two-semester capstone senior design project, represented by CMPE 4371 and CMPE 4372 or CMPE 4373 and CMPE 4374 in the degree plan. This project must be of substantial scope and complexity, demonstrate competencies from across the curriculum (in particular, the ability to design computer software, electronic hardware and integrate the two in systems) and address the social, economic and ethical consequences of the project. All courses in sections B1 - Computer Engineering Core, B2 - Senior Design, and B4 - Concentration must be completed with a grade of 'C' or better

CORE: The 2019-2020 list of core courses can be found at: www.utrgv.edu > Academics > Undergraduate > General Education Core
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.

126 TOTAL HOURS
(54) TOTAL ADVANCED HOURS

Approved: Wednesday, March 27, 2019
Revised: Wednesday, November 18, 2020