The University of Texas Rio Grande Valley

Bachelor of Science in Civil Engineering

2017-2018

		!	H	Course #	Course Title	Min. Grad	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 (Core)	C	020	#REF!	See General Education Core for more details.
			1	CIVE 1101	Introduction to Civil Engineering				CIVE 2220‡
			2	CIVE 2220	Civil Engineering Measurements				CIVE 1101‡
			3	CHEM 1307	Chemistry for Engineers			MATH 1314, MATH 1414, MATH 2412, or MATH 2487 with a grade of "C" or higher."	Or CHEM 1311 General Chemistry I
			1	CHEM 1107	Chemistry for Engineers Lab		090	Credit/registration in CHEM 1307.	Or CHEM 1111 General Chemistry I Lab
			3	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1301 or HIST 1387 or HIST/MASC 2327
				UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
			17	**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.	See General Education Core for more details Options: ENGL 1302 or ENGL 1388 (H) or ENGL 1305.
			4	MATH 2414	Calculus II			MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
			4	PHYS 2425	Physics for Scientists and Engineers I (Core)		030/090	Prerequisite: MATH 2413 Calculus I (or MATH 2387 Calculus I honors). Credit for or registration in: MATH 2414 Calculus II (or MATH 2388 Calculus II honors).	1 hour of lab for Core 090. See General Education Core for more details.
			3	MANE 2332	Engineering Statistics			MATH 2413 (or MATH 2487).	
			4	CIVE 2440	Civil Engineering Materials			CIVE 1101, CHEM 1307, 1107 or CHEM 1311, 1111	
			18	**Semester Total Hours**					

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SECOND YEAR	FALL		4	MATH 2415	Calculus III			MATH 2414	
			3	MECE 2301	Statics			A grade of 'C' or better in CIVI 1101 and PHYS 2425, and credit/registration in MATH 2414 (or MATH 2488).	
			3	MECE 2350	Numerical Methods for Engineers			Credit/registration in MATH 2414 (or MATH 2488).	
			4	PHYS 2426	Physics for Scientists and Engineers II (Core)		030/090	Minimum of grade 'C' in PHYS 2425	1 hour of lab for Core 090. See General Education Core for more details.
			3	POLS 2305	U.S. & Texas Government and Politics I		070		See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)
			17	**Semester Total Hours**					
	SPRING		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	MECE 2302	Dynamics			MECE 2301, MATH 2414	
			3	MECE 3321	Mechanics of Solids			MECE 2301, MATH 2414	
			3	MATH 3341	Differential Equations			MATH 2414	
			3	CIVE 3315	Fluid Mechanics and Hydraulics			MECE 2301, MATH 2415 or MECE 3449	
			1	CIVE 3115	Fluid Mechanics and Hydraulics Lab			CIVE 3315‡	
			16	**Semester Total Hours**					

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THIRD YEAR	FALL		3	MANE 3337	Engineering Economics			MANE 2332*	
			3	CIVE 3324	Structural Analysis			MECE 3321, CIVE 2440 or 2240 or 2140	
			3	CIVE 3331	Environmental Engineering			CHEM 1307, 1107 or 1311, 1111; CIVE 3315, 3115 or MECE 3315, 3115	
			4	CIVE 3475	Geotechnical Engineering and Applications			Minimum grade of 'C' in MECE 3321.	
			13	**Semester Total Hours**					
	SPRING		3	CIVE 3341	Structural Steel Design			Minimum grade of 'C' in CIVE 2240 and CIVE 3324.	
			3	CIVE 3345	Transportation Engineering			Minimum grade of 'C' in CIVE 2220.	
			3	CIVE 4335	Water Resources Engineering			CIVE 3315, 3115	
			3	CIVE 4346	Reinforced Concrete Design			CIVE 3324	
			3	Choose 1	Social and Behavioral Sciences (Core)		080		See General Education Core for course options.
			15	**Semester Total Hours**					
FOURTH YEAR	FALL	!	H	Course #	Course Title	Min. Grad	GEC	Prerequisite	Additional Notes
			3	CIVE 4349	Construction Planning & Management			MANE 3337	
			3	CIVE 43XX	Technical Elective I				CIVE 4333, 4347, 4348, 4350, 4351, 4352
			3	CIVE 4347	Foundation Design			CIVE 3475	
			3	CIVE 4391	CE Senior Fundamentals			CIVE 3341, CIVE 3345, CIVE 4335, CIVE 4346	
			3	PHIL 2326	Ethics, Technology, and Society (Core)		040	#REF!	See General Education Core for more details.
			3	POLS 2306	U.S. & Texas Government and Politics II		070		See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)
			18	**Semester Total Hours**					
	SPRING		3	CIVE 43XX	Technical Elective II				CIVE 4333, 4347, 4348, 4350, 4351, 4352
			3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
			3	CIVE 4392	CE Senior Project			CIVE 4391 CIVE 4347	
			3	Choose 1	Basic Science Elective				BIOL 1406; ENVR 1401/1402/3304/4301; GEOL 1401/1403/1404/3408
			3	Choose 1	Integrative & Experiential Learning		090		Choose one ENGL 23XX course from Language, Philosophy & Culture area.
			15	**Semester Total Hours**					

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.

129 TOTAL HOURS
(53) TOTAL ADVANCED HOURS

Approved: 6/16/2017
Revised: 06/13/2017

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

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.