The University of Texas RioGrande Valley Bachelor of Science (BS) Civil Engineering

!	! Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	Choose 1	Communication (Core)	С	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 (Core)	С	020	MATH 2412 with a grade of C or better; or passing the Pre- Calculus exemption test administered by the Department of Mathematics.	1 hr for Support Courses
	1	CIVE 1101	Introduction to Civil Engineering	С			CIVE 2220 [‡]
Ę	2	CIVE 2220	Civil Engineering Measurements	С			CIVE 1101 [‡]
× 5	3	CHEM 1309	Chemistry for Engineers	С		MATH 1314, MATH 1414, MATH 2412, or MATH 2413 with a grade of 'C' or higher	
	1	CHEM 1109	Chemistry for Engineers Lab	С	090	Credit/registration in CHEM 1309.	
	3	Choose 1	American History (Core)		060		Options: HIST 1301 or HIST/MASC 2327
FIRS		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.
	17 \$	Semester Total Hou					
	3	Choose 1	Communication (Core)	С	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.
<u>U</u>	4	MATH 2414	Calculus II	С		MATH 2413 with a grade of 'C' or better.	
SPRING	4	PHYS 2425	Physics for Scientists and Engineers I (Core)	С	030	MATH 2413 and concurrent enrollment in MATH 2414.	1 hour of lab for Core 090. See General Education Core for more details.
	3	MANE 3332	Engineering Statistics	С		MATH 2413 and credit for or enrollment in MATH 2414.	
	4	CIVE 3440	Civil Engineering Materials	С		Minimum grade of 'C' in CIVE 1101 and [CHEM 1309/1109].	
	18 5	Semester Total Hou	irs				
	! Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	4	MATH 2415	Calculus III	С		MATH 2414 with a grade of 'C' or better	
	3	MECE 2301	Statics	С		A grade of 'C' or better in [MECE 1101 or CIVE 1221 or CIVE 1101] and PHYS 2425; a grade of 'C' or better or concurrent enrollment in MATH 2414.	
	3	MECE 2350	Numerical Methods for Engineers	С		A grade of 'C' or better or concurrent enrollment in MATH 2414.	
AR F/	4	PHYS 2426	Physics for Scientists and Engineers II (Core)	С	030	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. Federal Govt & Politics		070		
Z	17 \$	Semester Total Hou	Irs				
SECO	3	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328.
	3	MECE 2302	Dynamics	С		A grade of 'C' or better in MECE 2301 and MATH 2414	
SN -	3	CIVE 3321	Mechanics of Materials	С		Minimum grade of 'C' in MECE 2301 and MATH 2414.	
SPRING	3	MATH 3341	Differential Equations	С		MATH 2414 with a grade of 'C' or better.	
S	3	CIVE 3315	Fluid Mechanics and Hydraulics	С		Minimum grade of 'C' in MECE 2301 and [MATH 2415 or MECE 3449].	
	1	CIVE 3115	Fluid Mechanics and Hydraulics Lab	С		CIVE 3315 [‡] . May be taken concurrently.	
	16 0	Semester Total Hou	rs		1		

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

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.

	! Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
RD YEAR FALL	3	MANE 3337	Engineering Economics	С		Credit/registration in MANE 2332 or MANE 3332.	
	3	CIVE 3324	Structural Analysis I	С		Minimum grade of 'C' in (MECE 3321 or CIVE 3321) and (CIVE 2240 or CIVE 3440 or CIVE 2140).	
	3	CIVE 3331	Environmental Engineering	С		Minimum grade of 'C' in CIVE 3315, CIVE 3115, and either CHEM 1309/1109 or CHEM 1311/1111.	
	4	CIVE 3475	Geotechnical Engineering and Applications	С		Minimum grade of 'C' in MECE 3321 or CIVE 3321.	
	3	POLS 2306	Texas Government & Politics		070		
王	16	Semester Total Hou					
	3	CIVE 3341	Structural Steel Design	С		Minimum grade of 'C' in CIVE 3324	
	3	CIVE 3345	Transportation Engineering	С		Minimum grade of 'C' in CIVE 2220 and MECE 2302	
SPRING	3	CIVE 4335	Water Resources Engineering	С		Minimum grade of 'C' in [CIVE 3315 and CIVE 3115 OR MECE 3315 and MECE 3115], MATH 3341, MECE 2350.	
с В	3	CIVE 4346	Reinforced Concrete Design	С		Minimum grade of 'C' in CIVE 3324	
	3	Choose 1	Social and Behavioral Sciences (Core)		080		See General Education Core for course options.
	15	Semester Total Hou	rs				
		Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	CIVE 4349	Construction Planning & Management	С		Minimum grade of 'C' in [MANE 3337 or CIVE 3252] and PHYS 2426.	
FALL	3	CIVE 43XX	Prescribed Elective I	С			Choose any two of these 4000-level courses, or one 4000-level and one of the 3000-level courses: CIVE 4315, 4333, 4348, 4351, 4352, 4359, 3300, 3100 (repeat for 3 credits)
FA	3	CIVE 4347	Foundation Design	С		Minimum grade of 'C' in CIVE 3475.	
~	3	CIVE 4391	CE Senior Fundamentals	С		A minimum GPA of 2.4, Senior Standing, and maximum 15 hrs enrolled in the semester	
YEA	3	PHIL 2326	Ethics, Technology, and Society (Core)		040		See General Education Core for more details.
E	15	Semester Total Hou	rs				
FOUR	3	CIVE 43XX	Prescribed Elective II	с			Choose any two of these 4000-level courses, or one 4000-level and one of the 3000-level courses: CIVE 4315, 4333, 4348, 4351, 4352, 4359, 3300, 3100 (repeat for 3 credits)
c)	3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
SPRING	3	CIVE 4392	CE Senior Project	С		A minimum GPA of 2.4, Senior Standing, and maximum 15 hrs enrolled in the semester	
	3	Choose 1	Basic Science Elective				BIOL 1406; ENVR 1401; GEOL 1401/1403/1404/4411
	3	Choose 1	Integrative & Experiential Learning (Core)		090		Complete an additional 3 hours from this section of the Core Curriculum except PHIL 2326.
	15	Semester Total Hou	rs				

Progression requirements:

Students must receive a grade of 'C' or better in all courses that are prerequisites for Civil Engineering courses.

Major Graduation requirements:

- 1. Students must receive a grade of 'C' or better in all CIVE courses.
- 2. A minimum overall institutional GPA of 2.4 is required to take CIVE 4391 CE Senior Fundamentals and CIVE 4392 CE Senior Project; therefore, a minimum GPA of 2.4 is necessary for graduation.

129 TOTAL HOURS (42 advanced minimum credit hours)

Approved: Friday, March 12, 2021 Revised: Monday, March 1, 2021