	ive Gra	ande Valley	y			Bachelor of Science (BS) Civil Engineering	2023-2024
!	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			*This course and CIVE 2220 should be your first CIV courses.
-	2	CIVE 2220	Civil Engineering Measurements**	С			**This course and CIVE 1101 should be your first C courses.
2	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 2327
		UNIV	1301 Learning Framework 1101 Academic and Career Success 1001 Living and Working by Design				As required, based on credit hours earned, TSI stat High School rank, major declaration.
	17	Semester Total	Hours			For all 010 courses: Satisfactory scores on English portion of ACT test	
	3	Choose 1	Communication (Core)	С	010	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 1302 or ENGL 1305.
!	4	MATH 2414	Calculus II	С		MATH 2413 with a grade of 'C' or better.	
	4	PHYS 2425	Physics for Scientists and Engineers I (Core)	С	030	MATH 2413.	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			Min	050		
1	Н	Course #	Course Title	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 CIVE 1101 and PHYS 2425; a grade of 'C' or better or concurrent enrollment in MATH 2414.	
1	3	CIVE 2350	Numerical Methods for Civil Engineers	С		A grade of 'C' or better or concurrent enrollment in MATH 2414.	
	4	PHYS 2426	Physics for Scientists and Engineers II (Core)	с	030	PHYS 2425 and MATH 2414.	1 hour of lab for Core 090. See General Education Core for more details.
	3	POLS 2305	U.S. Federal Govt & Politics		070		
	17	Semester Total	Hours				
	3	Choose 1	American History (Core)		060		See General Education Core for more details. Opti HIST 1302 or HIST 2328.
!	3	MECE 2302	Dynamics	С		A grade of 'C' or better in MECE 2301 and MATH 2414	
!	3	CIVE 3321	Mechanics of Materials	с		Minimum grade of 'C' in MECE 2301 and MATH 2414. Must be officially admitted to the Civil Engineering major.	
1	3	MATH 3341	Differential Equations	с		MATH 2414 with a grade of 'C' or better.	
!	3	CIVE 3315	Fluid Mechanics and Hydraulics	с		Minimum grade of 'C' in MECE 2301 and MATH 2415. Must be officially admitted to the Civil Engineering major.	
,	1	CIVE 3115	Fluid Mechanics and Hydraulics Lab	С		CIVE 3315. May be taken concurrently.	

! H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
! 3	MANE 3337	Engineering Economics	С		Credit/registration in MANE 3332.	
! 3	CIVE 3324	Structural Analysis I	С		Minimum grade of 'C' in CIVE 3321 and CIVE 3440.	
3 HL	CIVE 3331	Environmental Engineering	С		Minimum grade of 'C' in CIVE 3315, CIVE 3115, and CHEM 1309/1109.	
! 4	CIVE 3475	Geotechnical Engineering and Applications	С		Minimum grade of 'C' in CIVE 3321.	
3 XEAR		Texas Government & Politics		070		
2 1	6 Semester Total	Hours				
! 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], MATH 3341, MECE 2350.	
ل ا	CIVE 4346	Reinforced Concrete Design	С		Minimum grade of 'C' in CIVE 3324	
3		Social and Behavioral Sciences (Core)		080		See General Education Core for course options.
1	5 Semester Total	Hours				
! н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
3	CIVE 4349	Construction Planning & Management	С		Minimum grade of 'C' in MANE 3337 and PHYS 2426.	
3		Construction Planning & Management Prescribed Elective I	c c		Minimum grade of 'C' in MANE 3337 and PHYS 2426.	Choose any two of these 4000-level courses, or one 4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352, 4359, 3300, 3100 (repeat for 3 credits)
3	CIVE 43XX or				Minimum grade of 'C' in MANE 3337 and PHYS 2426.	4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352,
3 FALL 3	CIVE 43XX or CIVE 33XX	Prescribed Elective I	С			4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352,
AFAR 3 3 3 3	CIVE 43XX or CIVE 33XX CIVE 4347 CIVE 4391 PHIL 2326	Prescribed Elective I Foundation Design CE Senior Fundamentals Ethics, Technology, and Society (Core)	C C	040	Minimum grade of 'C' in CIVE 3475. Senior Standing, a minimum GPA of 2.4 and a grade of C or better in	4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352,
AR FALL 3 3	CIVE 43XX or CIVE 33XX CIVE 4347 CIVE 4391 PHIL 2326	Prescribed Elective I Foundation Design CE Senior Fundamentals Ethics, Technology, and Society (Core)	C C		Minimum grade of 'C' in CIVE 3475. Senior Standing, a minimum GPA of 2.4 and a grade of C or better in	4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352, 4359, 3300, 3100 (repeat for 3 credits)
AFAR 3 3 3 3	 CIVE 43XX or CIVE 43XX or CIVE 33XX CIVE 4347 CIVE 4391 PHIL 2326 Semester Total 	Prescribed Elective I Foundation Design CE Senior Fundamentals Ethics, Technology, and Society (Core)	C C		Minimum grade of 'C' in CIVE 3475. Senior Standing, a minimum GPA of 2.4 and a grade of C or better in	4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352,
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	CIVE 43XX or CIVE 43XX or CIVE 33XX CIVE 4347 CIVE 4347 CIVE 4391 CIVE 4391 CIVE 4391 CIVE 43XX or CIVE 43XX or CIVE 33XX	Prescribed Elective I Foundation Design CE Senior Fundamentals Ethics, Technology, and Society (Core) Hours	C C C		Minimum grade of 'C' in CIVE 3475. Senior Standing, a minimum GPA of 2.4 and a grade of C or better in	4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352, 4359, 3300, 3100 (repeat for 3 credits) Choose any two of these 4000-level courses, or one 4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352,
	 CIVE 43XX or CIVE 43XX CIVE 4347 CIVE 4391 PHIL 2326 Semester Total CIVE 43XX or CIVE 33XX CIVE 43XX or CIVE 33XX Choose 1 	Prescribed Elective I Foundation Design CE Senior Fundamentals Ethics, Technology, and Society (Core) Hours Prescribed Elective II	C C C	040	Minimum grade of 'C' in CIVE 3475. Senior Standing, a minimum GPA of 2.4 and a grade of C or better in	4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352, 4359, 3300, 3100 (repeat for 3 credits) Choose any two of these 4000-level courses, or one 4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352, 4359, 3300, 3100 (repeat for 3 credits)
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	 CIVE 43XX or CIVE 33XX CIVE 4347 CIVE 4391 PHIL 2326 Semester Total CIVE 43XX or CIVE 33XX Choose 1 CIVE 4392 	Prescribed Elective I Foundation Design CE Senior Fundamentals Ethics, Technology, and Society (Core) Hours Prescribed Elective II Creative Arts (Core)	с с с с	040	Minimum grade of 'C' in CIVE 3475. Senior Standing, a minimum GPA of 2.4 and a grade of C or better in CIVE 3324, CIVE 3331, CIVE 3345, CIVE 3475 and CIVE 4335.	4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352, 4359, 3300, 3100 (repeat for 3 credits) Choose any two of these 4000-level courses, or one 4000-level and one of the 3000-level courses: CIVE 4300, 4315, 4333, 4340, 4348, 4350, 4351, 4352, 4359, 3300, 3100 (repeat for 3 credits)
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	 CIVE 43XX or CIVE 43XX CIVE 4347 CIVE 4391 PHIL 2326 Semester Total CIVE 43XX or CIVE 33XX CIVE 43XX or CIVE 33XX Choose 1 	Prescribed Elective I Foundation Design CE Senior Fundamentals Ethics, Technology, and Society (Core) Hours Prescribed Elective II Creative Arts (Core)	с с с с	040	Minimum grade of 'C' in CIVE 3475. Senior Standing, a minimum GPA of 2.4 and a grade of C or better in CIVE 3324, CIVE 3331, CIVE 3345, CIVE 3475 and CIVE 4335.	4000-level and one of the 3 4300, 4315, 4333, 4340, 4 4359, 3300, 3100 (repeat f 4359, 3300, 3100 (repeat f 4300, 4315, 4333, 4340, 4 4359, 3300, 3100 (repeat f

Admissions requirement A minimum grade of C or better in MATH 2413 in no more than three attempts or a minimum composite score of 24 on the ACT or 1200 on the SAT

A finitional groups of G of concerning and the first of t

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.

CORE: The 2023-2024 list of core courses can be found in the 2023-2024 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.

129 TOTAL HOURS (42 advanced minimum credit hours)

Approved: Monday, March 27, 2023 Revised: Monday, March 27, 2023