Th	e Un	iversity of Texas	Bachelor of Scien	ce (BS	5)		2019-2020
Ri	00	iversity of Texas Frande Valle	Mathematics Concentration: Put	ro Mot	homotion		
	· H	Course #	Course Title	Min. Grade		Prerequisite	Additional Notes
	3	Choose 1	Communication (Core)	С	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 <b>or</b> ENGL 1387 (H)
	! 4	MATH 2413	Calculus I	с	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	Prerequiste for MATH 2412: MATH 1314/1414 with a grade of "C" or better or passing Exemption Test administered by Department of Mathematics
FALL	3	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1301 or HIST 1387 (H) or HIST/MASC 2327
	3	Choose 1	Integrative/Experiential Learning Option (Core)		090		Recommended: CSCI 1380
EAR	3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
IRST Y		UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
	16	Semester Total Hours					
	3	Choose 1	Communication (Core)	с	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	С		MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
SPRING	! 3	MATH 2318	Linear Algebra	С		MATH 2413 (or MATH 2487) 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 (H) or HIST/MASC 2328
	3	Choose 1	Social and Behavioral Sciences (Core)		080		Recommended: ECON 1301 or ECON 2301
	16	Semester Total Hours					
	· H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	! 4	MATH 2415	Calculus III	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	· 3	MATH 3341	Differential Equations	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
FALL	3	Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2305 <b>or</b> POLS 2385 (H)
	4	Choose 1	Life and Physical Sciences (Core)		030/090		Recommended: PHYS 2425
D YEAR	3	Choose 1	Language, Philosophy & Culture (Core)		040		See General Education Core for course options.
ECON	17	Semester Total Hours					
S	3	MATH 3352	Modern Geometry I	С		MATH 2318 with a grade of 'C' or better.	
	! 3	MATH 3350	Introduction to Mathematical Proof	С		MATH 2318 with a grade of 'C' or better.	
SPRING	3	Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2306 <b>or</b> POLS 2386 (H)
	1	Choose 1	Integrative/Experiential Learning Option (Core)		090		See General Education Core for course options.
	4	Choose 1	Life and Physical Sciences (Core)		030/090		Recommended: PHYS 2426
	14	Semester Total Hours					

## 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.

•	н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	MATH 3363	Modern Algebra I	с		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
	3	MATH 3365	Number Theory	с		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
FALL	3	MATH 4342	Complex Variables	С		MATH 2415 with a grade of 'C' or better.	
	3	MATH 3345 or MATH 3361	Advanced Mathematics Electives	с		MATH 2318 with a grade of 'C' or better.	
<u>د</u>	3	X3XX X3XX	Free Elective				
RD YEA	15	Semester Total Hours					
THIF	3	MATH 3372	Real Analysis I	с		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
	3	STAT 3337	Probability and Statistics	С		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
PRING	3	MATH 3349	Numerical Methods	с		MATH 2414 (or MATH 2488) and MATH 3343, each with a grade of 'C' or better.	
S	3	MATH 43XX	Major Advanced Elective	С			See Degree Plan for course options.
	3	X3XX X3XX	Free Elective				
	15	Semester Total Hours					
	15	Semester Total Hours					
	1 <b>5</b> Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	_		Course Title Mathematics Project	Min. Grade C	GEC	Prerequisite MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better.	Additional Notes
	Н	Course #		Grade	GEC	MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all	Additional Notes
	н 3	Course # MATH 4390	Mathematics Project	Grade C	GEC	MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or	Additional Notes  See Degree Plan for course options.
	н 3 3	Course # MATH 4390 MATH 4355	Mathematics Project Topology	Grade C C	GEC	MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or	
	н 3 3 3	Course # MATH 4390 MATH 4355 MATH 43XX	Mathematics Project Topology Major Advanced Elective	Grade C C	GEC	MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or	
JURTH YEAR FALL	н 3 3 3 3	Course # MATH 4390 MATH 4355 MATH 43XX 33XX-43XX	Mathematics Project Topology Major Advanced Elective Free Advanced Elective	Grade C C	GEC	MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or	
JURTH YEAR FALL	н 3 3 3 3 3	Course # MATH 4390 MATH 4355 MATH 43XX 33XX-43XX X3XX X3XX	Mathematics Project Topology Major Advanced Elective Free Advanced Elective	Grade C C	GEC	MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or	
JURTH YEAR FALL	н 3 3 3 3 3 3 3 15	Course # MATH 4390 MATH 4355 MATH 43XX 33XX-43XX X3XX X3XX Semester Total Hours	Mathematics Project Topology Major Advanced Elective Free Advanced Elective Free Elective	C C C	GEC	MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or	See Degree Plan for course options.
JURTH YEAR FALL	н 3 3 3 3 3 3 15 3	Course # MATH 4390 MATH 4355 MATH 43XX 33XX-43XX X3XX X3XX Semester Total Hours MATH 43XX	Mathematics Project Topology Major Advanced Elective Free Elective Major Advanced Elective	C C C C	GEC	MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or	See Degree Plan for course options.
DURTH YEAR FALL	н 3 3 3 3 3 3 3 3 3 3 3 3 3	Course # MATH 4390 MATH 4355 MATH 43XX 33XX-43XX X3XX X3XX Semester Total Hours MATH 43XX MATH 43XX	Mathematics Project Topology Major Advanced Elective Free Elective Major Advanced Elective Major Advanced Elective Major Advanced Elective	C C C C	GEC	MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better. MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or	See Degree Plan for course options.

Graduation Requirements:

1. The student must complete all these major course requirements and all MATH and MATE courses with grades of 'C' or better and have with a GPA for the major of 2.5 or better.

120 TOTAL HOURS

(54) TOTAL ADVANCED HOURS

Approved: Thursday, June 13, 2019 Revised: Monday, May 6, 2019