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 1387 (H)
!	4	MATH 2413	Calculus I	C	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
	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
	3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
		UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.

16 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	MATH 2318	Linear Algebra	C		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

SECOND YEAR

FALL

!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
!	4	MATH 2415	Calculus III	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
!	3	MATH 3341	Differential Equations	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	3	Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2305 **or** POLS 2385 (H)
	4	Choose 1	Life and Physical Sciences (Core)		030/090		Recommended: PHYS 2425
	3	Choose 1	Language, Philosophy & Culture (Core)		040		See General Education Core for course options.

17 Semester Total Hours

SPRING

!	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	MATH 3343	Introduction to Mathematical Software	C		MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
!	3	MATH 3350	Introduction to Mathematical Proof	C		MATH 2318 with a grade of 'C' or better.	
	3	Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2306 **or** 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.

	H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
THIRD YEAR / FALL	3	MATH 3363	Modern Algebra I	C		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
	3	MATH 3352	Modern Geometry I	C		MATH 2318 with a grade of 'C' or better.	
	3	STAT 2331	Essentials of Statistics	C		MATH 1314, MATH 1414, MATH 1324, MATH 1342, or MATH 1343 with a grade of 'C' or better	
	3	MATH 3345	Linear Optimization	C		MATH 2318 with a grade of 'C' or better.	
	3	X3XX X3XX	Free Elective				
	15	**Semester Total Hours**					
SPRING	3	MATH 3372	Real Analysis I	C		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
	3	STAT 3337	Probability and Statistics	C		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
	3	MATH 3349	Numerical Methods	C		MATH 2414 (or MATH 2488) and MATH 3343, each with a grade of 'C' or better.	
	3	MATH 4344	Boundary Value Problems	C		MATH 3341 or MATH 2321 with a grade of 'C' or better.	
	3	X3XX X3XX	Free Elective				
	15	**Semester Total Hours**					
FOURTH YEAR / FALL	3	MATH 4390	Mathematics Project	C		MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of 'C' or better.	
	3	MATH 3361	Applied Discrete Mathematics	C		MATH 2318 with a grade of 'C' or better.	
	3	MATH 4342	Complex Variables	C		MATH 2415 with a grade of 'C' or better.	
	3	33XX-43XX	Free Advanced Elective				
	3	X3XX X3XX	Free Elective				
	15	**Semester Total Hours**					
SPRING	3	MATH 3347	Elementary Cryptology	C		MATH 2318 with a grade of 'C' or better.	
	3	MATH 4346	Integral Transforms	C		MATH 2415 and either MATH 3341 or MATH 2321, both with a grade of 'C' or better.	
	3	33XX-43XX	Free Advanced Elective				
	3	33XX 43XX	Free Advanced Elective				
	12	**Semester Total Hours**					

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 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