

	I	H	A	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FIRST YEAR	FALL			3	Choose 1			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			MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	<b>Prerequisite for MATH 2412:</b> MATH 1314/1414 with a grade of "C" or better or passing Exemption Test administered by Department of Mathematics
				3	Choose 1				See General Education Core for more details. Options: HIST 1301 or HIST 1387 or HIST/MASC 2327
				3	Choose 1				Recommended: CSCI 1380
					Choose 1				See General Education Core for course options.
					UNIV 1301				Only if required, based on ACT/SAT and high school rank.
	<b>16 (0) Semester Total Hours</b>								
	SPRING			3	Choose 1			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			MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
				3	MATH 2318			MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
				3	Choose 1				See General Education Core for more details. Options: HIST 1302 or HIST 1388 or HIST/MASC 2328
				3	Choose 1				Recommended: ECON 1301 or ECON 2301
	<b>16 (0) Semester Total Hours</b>								
SECOND YEAR	FALL			4	MATH 2415			MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
				3 (3)	MATH 3341			MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
				3	Choose 1				See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)
				4	Choose 1				Recommended: PHYS 2425
				3	Choose 1				See General Education Core for course options.
	<b>17 (3) Semester Total Hours</b>								
	SPRING			3 (3)	MATH 3343			MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.	
				3 (3)	MATH 3350			MATH 2318 with a grade of 'C' or better.	
				3	Choose 1				See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)
				1	Choose 1				See General Education Core for course options.
				4	Choose 1				Recommended: PHYS 2426
	<b>14 (6) Semester Total Hours</b>								

**CORE:** The 2018-2019 list of core courses can be found at: [www.utrgv.edu](http://www.utrgv.edu) > Academics > Undergraduate > General Education Core  
[www.utrgv.edu/core](http://www.utrgv.edu/core)

**Symbols Key**

**Critical ('I'):** 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.

**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.

THIRD YEAR	FALL	I	H	A	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
			3	(3)	MATH 3363	Modern Algebra I	c		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
			3	(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	(3)	MATH 3345	Linear Optimization	c		MATH 2318 with a grade of 'C' or better.	
			3		X3XX X3XX	Free Elective				
	15 (9) Semester Total Hours									
	SPRING		3	(3)	MATH 3372	Real Analysis I	c		MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.	
			3	(3)	STAT 3337	Probability and Statistics	c		MATH 2414 (or MATH 2488) with a grade of 'C' or better.	
			3	(3)	MATH 3349	Numerical Methods	c		MATH 2414 (or MATH 2488) and MATH 3343, each with a grade of 'C' or better.	
		3	(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 (12) Semester Total Hours										
FOURTH YEAR	FALL	I	H	A	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
			3	(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	(3)	MATH 3361	Applied Discrete Mathematics	c		MATH 2318 with a grade of 'C' or better.	
			3	(3)	MATH 4342	Complex Variables	c		MATH 2415 with a grade of 'C' or better.	
			3	(3)	33XX-43XX	Free Advanced Elective				
			3		X3XX X3XX	Free Elective				
		15 (12) Semester Total Hours								
	SPRING		3	(3)	MATH 3347	Elementary Cryptology	c		MATH 2318 with a grade of 'C' or better.	
			3	(3)	MATH 4346	Integral Transforms	c		MATH 2415 and either MATH 3341 or MATH 2321, both with a grade of 'C' or better.	
			3	(3)	33XX-43XX	Free Advanced Elective				
		3	(3)	33XX 43XX	Free Advanced Elective					
12 (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.
2. In addition to the graduation requirements listed in the UTRGV 2018-2019 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 to six credit hours of college-level language coursework.

**120 TOTAL HOURS**  
**(54) TOTAL ADVANCED HOURS**

Approved: Tuesday, April 3, 2018  
Revised: Thursday, July 5, 2018