## The University of Texas Rio Grande Valley

## **Bachelor of Science (BS)**

Mathematics

$\sim$	dianac van	Concentration: Statis				
! H	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 Options: ENGL 1301
! 4	MATH 2413	Calculus I (Core)	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 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/MASC 2327
3	CSCI 1380	Computer Science I (Core)		090	Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.	
3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
	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
16	Semester Total Hours					
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
! 4	MATH 2414	Calculus II	С		MATH 2413 with a grade of 'C' or better.	
! 3	MATH 2318	Linear Algebra	С		MATH 2413 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/MASC 2328
3	ECON 1301 or ECON 2301	Introduction to Economics or Principles of Macroeconomics (Core)		080		
16	Semester Total Hours		h 41	_		
' H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
! 3	MATH 1342	Elementary Statistical Methods	С		College Ready TSI status in Mathematics.	
! 4	MATH 2415	Calculus III	С		MATH 2414 with a grade of 'C' or better.	
3	POLS 2305	U.S. Federal Government & Politics (Core)		070		See General Education Core for more details
4	PHYS 2425	Physics for Scientists and Engineers I (Core)		030/090	MATH 2413 and concurrent enrollment in MATH 2414.	
3	Choose 1	Language, Philosophy & Culture (Core)		040		See General Education Core for course options.
17	Semester Total Hours					
: 3	MATH 3350	Introduction to Mathematical Proof	с		MATH 2318 with a grade of 'C' or better.	
! 3	MATH 3341	Differential Equations	С		MATH 2414 with a grade of 'C' or better.	
3	POLS 2306	Texas Government & Politics (Core)		070		See General Education Core for more details
1	Choose 1	Integrative/Experiential Learning Option (Core)		090		See General Education Core for course options.
	PHYS 2426	Physics for Scientists and Engineers II (Core)		030/090	PHYS 2425.	
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CORE: The 2021-2022 list of core courses can be found in the 2021-2022 Undergraduate Catalog: www.utrgv.edu > 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.

י H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
3	STAT 3301	Applied Statistics	с		MATH 2413 with a grade of 'C' or better.	
3	MATH 3352	Modern Geometry I	с		MATH 2318 with a grade of 'C' or better.	
EALL 3	MATH 3363	Modern Algebra I	с		MATH 2318 and MATH 3350, each with a grade of 'C' or better.	
3	MATH 3343	Introduction to Mathematical Software	С		MATH 2414 and MATH 2318 with a grade of 'C' or better.	
3	X3XX X3XX	Free Elective				
15	Semester Total Hours					
3	MATH 3372	Real Analysis I	С		MATH 2414 and MATH 3350, each with a grade of 'C' or better.	
3	STAT 3336	Sampling	С		STAT 3301 with a grade of 'C' or better.	
SRING	STAT 3335	Applied Regression Analysis	С		MATH 2318 and STAT 3301 both with grade of 'C' or better.	
<del>ت</del> 3	STAT 3337	Probability and Statistics	С		MATH 2414 with a grade of 'C' or better.	
3	X3XX X3XX	Free Advanced Elective				
15	Semester Total Hours					
∙н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	Course # MATH 4390	Course Title Mathematics Project	Min. Grade C	GEC	Prerequisite Pre- or co-requisite in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.	Additional Notes
∙н			Grade	GEC	Pre- or co-requisite in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH	Additional Notes
• н З	MATH 4390	Mathematics Project	Grade	GEC	Pre- or co-requisite in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH	Additional Notes Choose 3 advanced hours of MATH.
· H 3 3	MATH 4390 X3XX X3XX	Mathematics Project Free Advanced Elective	Grade C	GEC	Pre- or co-requisite in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH	
<ul> <li>H</li> <li>3</li> <li>3</li> <li>3</li> </ul>	MATH 4390 X3XX X3XX MATH X3XX	Mathematics Project Free Advanced Elective Advanced Math Elective	Grade C	GEC	Pre- or co-requisite in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH	
EAL AND A CONTRACT OF A CONTRA	MATH 4390 X3XX X3XX MATH X3XX 33XX-43XX	Mathematics Project Free Advanced Elective Advanced Math Elective Free Advanced Elective	Grade C	GEC	Pre- or co-requisite in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH	
EAL AND A CONTRACT OF A CONTRA	MATH 4390 X3XX X3XX MATH X3XX 33XX-43XX X3XX X3XX	Mathematics Project Free Advanced Elective Advanced Math Elective Free Advanced Elective	Grade C	GEC	Pre- or co-requisite in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH	
H 3 3 1 3 3 3 3 3 3 3 15	MATH 4390 X3XX X3XX MATH X3XX 33XX-43XX X3XX X3XX Semester Total Hours	Mathematics Project Free Advanced Elective Advanced Math Elective Free Advanced Elective Free Elective	C C C	QEC	Pre- or co-requisite in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.	
<ul> <li>H</li> <li>3</li> <li>4</li> <li>4</li></ul>	MATH 4390 X3XX X3XX MATH X3XX 33XX-43XX X3XX X3XX Semester Total Hours STAT 3338	Mathematics Project         Free Advanced Elective         Advanced Math Elective         Free Advanced Elective         Free Elective         Mathematical Statistics	C C C C C C C	GEC	Pre- or co-requisite in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.	
H 3 3 3 11 4 3 3 3 3 3 3 15 3 3 3 15 3 3	MATH 4390 X3XX X3XX MATH X3XX 33XX-43XX X3XX X3XX Semester Total Hours STAT 3338 MATH 3349	Mathematics Project         Free Advanced Elective         Advanced Math Elective         Free Advanced Elective         Free Elective         Mathematical Statistics         Numerical Methods	C C C C C C C	GEC	Pre- or co-requisite in MATH 2415, STAT 3337, MATH 3341, MATH 3352, MATH 3363, MATH 3372.	

Major Graduation Requirements:

Major requirements must be completed with a minimum grade of 'C' and a minimum GPA of 2.5.

## 120 TOTAL HOURS

42 Advanced minimum credit hours

Approved: Saturday, October 23, 2021 Revised: Sunday, October 3, 2021