



**A.S. in Mathematics**  
to  
**B.S. in Mathematics (Pure Math)**

This four-year plan provides a model for on-time completion of the B.S. in Mathematics (Pure Math) at UTRGV by starting at South Texas College.

Year	First Semester		Second Semester		
	STC Requirement	UTRGV Equivalent	STC Requirement	UTRGV Equivalent	
<b>FRESHMAN</b>	Creative Arts Core	Creative Arts Core	HIST 1301 or HIST 2327 (American History Core)	HIST 1301 or HIST 2327 (American History Core)	
	PHYS 2425 (Life & Physical Science Core)	PHYS 2425 (Life & Physical Science Core, <b>Required at UTRGV</b> )	PHYS 2426 (Life & Physical Science Core)	PHYS 2426 (Life & Physical Science Core, <b>Required at UTRGV</b> )	
	ENGL 1301 (Communications Core)	ENGL 1301 (Communications Core)	ENGL 1302 (Communications Core)	ENGL 1302 (Communications Core)	
	MATH 2413 (Mathematics Core)	MATH 2413 (Mathematics Core, <b>Required at UTRGV</b> )	MATH 2414 (Major)	MATH 2414 (Major)	
	Third Semester				
		STC Requirement		UTRGV Equivalent	
	HIST 1302 or HIST 2328 (American History Core)		HIST 1302 or HIST 2328 (American History Core)		
	Language, Philosophy & Culture Core		Language, Philosophy & Culture Core		
Year	Fourth Semester		Fifth Semester		
	STC Requirement	UTRGV Equivalent	STC Requirement	UTRGV Equivalent	
<b>SOPHOMORE</b>	MATH 2415 (Major)	MATH 2415 (Major)	MATH 2418 (Major)	MATH 2318 (Major)	
	GOVT 2305 (Political Science Core)	POLS 2305 (Political Science Core)	GOVT 2306 (Political Science Core)	POLS 2306 (Political Science Core)	
	MATH 2305 or MATH 1442 (Major)	MATH 2305 or MATH 1342 (Fulfills free elective)	MATH 2420 (Major)	MATH 2000 (fulfills Differential Equations requirement, but does not meet institutional advanced minimum hours)	
	ECON 2301 (Social & Behavioral Sciences Core)	ECON 2301 (Social & Behavioral Science Core, <b>Required at UTRGV</b> )	COSC 1436 (Component Area Option Core)	CSCI 1380 (Integrative and Experiential Learning Core, <b>Required at UTRGV</b> )	

Year	Fall Semester	Spring Semester
J U N I O R	MATH 3352 Modern Geometry I	MATH 3363 Modern Algebra I
	MATH 3350 Introduction to Mathematical Proof	MATH 3365 Number Theory
	MATH 4342 Complex Variables	MATH 3345 or MATH 3361 Advanced Math Elective
	Free Elective	MATH 3372 Real Analysis I
	Free Elective	Free Elective
Year	Fall Semester	Spring Semester
S E N I O R	STAT 3337 Probability and Statistics	MATH or STAT 43XX Advanced Elective
	MATH 3349 Numerical Methods	MATH 4390 Mathematics Project
	MATH or STAT 43XX Advanced Elective	MATH 4355 Topology
	MATH 4359, 4364, 4367 or 4373	MATH 4359, 4364, 4367 or 4373
	Free Elective	Advanced Free Elective

This degree requires 120 hours and a minimum of 42 advanced (3000 and 4000) credit hours.  
Free electives hours will vary to achieve the institutional minimum of 120 hours for a degree.