CLEAR PATH for ADVISING – *Mathematics: STEM Education, B.S.* 2025-2026

Please refer to the Undergraduate Catalog for further program requirements and course descriptions.

First Year – 29-31 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
MATH 1950: *Calculus with Analytic Geometry I* (Quantitative Reasoning)	4	MATH 1960: *Calculus with Analytic Geometry II*	4
CPSC 1100: *Fundamentals of Computer Science*	4	MATH 2200: *Elementary Linear Algebra*	3
Writing and Communication (ENGL 1010 or 1011)	3-4	STEM 1030: *Step One/Two: Inquiry-Based Mathematics and Science Teaching*	2
Behavioral and Social Science	3	Writing and Communication (ENGL 1020)	3
		Humanities and Fine Arts	3-4
	14-15		15-16
Second Year – 33-34 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
MATH 2300: *Mathematical Models, Functions and Applications*	3	MATH 2560: *Calculus with Analytic Geometry III*	4
MATH 2450: *Introduction to Differential and Difference Equations*	3	MATH 3000: *Introduction to Logic and Proof*	3
PHYS 1030/1030L: *General Physics - Mechanics and Heat/Lab* or PHYS 2300/2300L: *Principles of Physics - Mechanics and Heat/Lab* (Natural Science)	4	PHYS 1040/1040L: *General Physics - Electromagnetism and Optics/Lab* or PHYS 2310/2310L: *Principles of Physics - Electricity and Magnetism* (Natural Science)	4
STEM 2010: *Knowing and Learning*	3	STEM 2020: *Classroom Interactions*	3
Humanities and Fine Arts	3-4	Behavioral and Social Science	3
	16-17		17
Third Year – 30-32 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
MATH 3100: *Applied Statistics* or MATH 4130: *Introduction to Probability and Statistics* (Quantitative Reasoning)*	3	MATH 3820: *Communicating Mathematics*	3
MATH 3250: *Introduction to Modern Algebra* or MATH 4200: *Linear Algebra and Matrix Theory*	3	MATH 4010: *Basic Concepts of Geometry*	3
MATH Elective (3000-4000 Level)	3	MATH Elective (3000-4000 Level) or MATH 4140: *Mathematical Statistics* (Quantitative Reasoning)*	3
STEM 3010: *Perspectives on Science and Mathematics*	3	STEM 3020: *Research Methods in Science*	3
Humanities and Fine Arts	3-4	Individual and Global Citizenship	3-4
	15-16		15-16
Fourth Year – 25-29 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
EDUC 2170: *Technology and Learning*	1	EDUC 4420: *Professional Seminar*	2
MATH 3510: *Introduction to Analysis I*	3	STEM 4020: *Apprentice Teaching*	10
MATH Elective (3000-4000 Level)	3		
STEM 4010: *Project-Based Instruction*	3		
Humanities and Fine Arts	3-4		
Elective	0-3		
	13-17		12

*Must take either a) MATH 3100 and 9 credit hours of MATH Electives (3000-4000 level) or b) MATH 4130 and MATH 4140 with 6 credit hours of MATH Electives (3000-4000 level). *Either MATH 3100 or MATH 4140 will fulfill the Quantitative Reasoning requirement.*

Completed:			
Graduation Requirements:	**Hrs**	**Degree Requirements:**	**Hrs**
120 Total Hours		27-33 General Education Hours	
39 Upper Division (3000-4000 Level) Hours		90 Program (Major) Hours	
30 Hours at UTC		Minor *(Not Required)*	
45 Hours at 4-year Institution		0-3 Elective Hours	
		Foreign Language *(Not Required)*	