CLEAR PATH for ADVISING – *Mathematics: STEM Education, B.S.* 2023-2024

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

First Year – 39-32 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
MATH 1950: *Calculus w/ Analytic Geometry I* (Quantitative Reasoning)	4	MATH 1960: *Calculus w/ Analytic Geometry II*	4
CPSC 1100: *Fundamental of Computer Science*	4	MATH 2200: *Elementary Linear Algebra*	3
Writing and Communication (ENGL 1010 or 1011)	3-4	Writing and Communication (ENGL 1020)	3
STEM 1030: *Step One/Two: Inquiry-Based Math & Science Teaching*	2	Behavioral and Social Science	3
Elective	0-1	Humanities and Fine Arts	3-4
	13-15		16-17
Second Year – 33-34 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
STEM 2010: *Knowing and Learning*	3	STEM 2020: *Classroom Interactions*	3
MATH 2300: *Mathematical Models, Fuctions & Applications*	3	MATH 2560: *Calculus w/ Analytical Geometry III*	4
MATH 2450: *Intro to Differential/Difference Equations*	3	MATH 3000: *Intro to Logic and Proof*	3
PHYS 1030/1030L: *Gen Physics - Mechanics & Heat/Lab* or PHYS 2300/2300L: *Principles of Physics - Mechanics & Heat/Lab* (Natural Science)	4	PHYS 1040/1040L: *Gen Physics - Eletromagnetism & Optics/Lab* or PHYS 2310/2310L: *Principles of Physics - Electricity & Magnetism* (Natural Science)	4
Humanities and Fine Arts	3-4	Behavioral and Social Science	3
	16-17		17
Third Year – 27-32 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
STEM 3010: *Perspectives on Science & Math*	3	STEM 3020: *Research Methods in Science*	3
MATH 3100: Applied Statistics or MATH 4130: Intro to Probability and Statistics (Quantitative Reasoning)*	3	MATH 3820: *Communicating Mathematics*	3
MATH 3250: *Intro to Modern Algebra* or MATH 4200: *Linear Algebra and Matrix Theory*	3	MATH 4010: *Basic Concepts of Geometry*	3
Humanities and Fine Arts	3-4	MATH Elective or MATH 4140: *Mathematical Statistics* (Quantitative Reasoning)*	3
Elective	0-3	Individual and Global Citizenship	3-4
	12-16		15-16
Fourth Year – 24-28 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
STEM 4010: *Project-Based Instruction*	3	STEM 4020r: *Apprentice Teaching*	6
MATH 3510: *Intro to Analysis I*	3	MATH Elective (3000-4000 Level)	3
EDUC 4170: *Technology & Learning*	3	Humanities and Fine Arts	3-4
MATH Elective (3000-4000 Level)	3		
Elective	0-3		
	12-15		12-13

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

Completed:			
Graduation Requirements:	**Hrs**	**Degree Requirements:**	**Hrs**
120 Total Hours		27-34 General Education Hours	
39 Upper Division (3000-4000) Hours		86 Program (Major) Hours	
30 Hours at UTC		Minor *(Not Required)*	
45 Hours at 4-year Institution		0-7 Elective Hours	
		Foreign Language *(Not Required)*	