## CLEAR PATH for ADVISING – *Geology: STEM Education, B.S.*

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

First Year – 34-37 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
Approved Introductory Geology Course	4	GEOL 1120/1120L: Historical Geology/Lab	4
CHEM 1110/1110L: General Chemistry I /Lab (Natural Science)	4	CHEM 1120/1120L: General Chemistry II/Lab (Natural Science)	4
MATH 1730: Combined Precalculus or MATH 1950: Calculus with Analytic Geometry (Quantitative Reasoning)	4	MATH 2100: Introductory Statistics (Quantitative Reasoning)	3
STEM 1030: Step One/Two: Inquiry-Based Math & Science Teaching	2	Humanities and Fine Arts	3-4
Writing and Communication (ENGL 1010 or 1011)	3-4	Writing and Communication (ENGL 1020)	3
		Elective (MATH 1799 recommended)	0-1
	17-18		17-19
Second Year – 36-37 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
STEM 2010: Knowing and Learning	3	STEM 2020: Classroom Interactions	3
GEOL 3410/3410L: Mineralogy/Lab	4	GEOL 2100/2100L: Introductory Geographic Information Systems and Remote Sensing/Lab	4
PHYS 1030/1030L: Gen Physics-Mechanics & Heat/Lab, PHYS 2300/2300L: Princ of Physics-Mechanics & Heat/Lab , or BIOL 1110/1110L: Principles of Bio I/Lab	4	GEOL 2200: Global Climate Change: Past, Present, and Future	3
Humanities and Fine Arts	3-4	GEOL 3420/3420L: Petrology/Lab	4
Individual and Global Citizenship	3-4	PHYS 1040/1040L: Gen Physics-Electromagnetism & Optics/Lab , PHYS 2310/2310L: Princ of Physics-Electricity & Magnetism /Lab , or BIOL 1120/1120L: Principles of Bio II/Lab	, 4
	17-19		18
Third Year – 33-34 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
STEM 3010: Perspectives on Science & Math	3	STEM 3020: Research Methods in Science	3
GEOL 2250: Oceanography	3	ASTR 1010/1010L: Intro to Astronomy-The Solar System/Lab	4
GEOL 4510/4510L: Structural Geology/Lab	4	GEOL 3540/3540L: Sedimentology and Stratigraphy/Lab	4
Behavioral and Social Science	3	GEOL 4080 : Earth Surface Processes	3
Humanities and Fine Arts	3-4	Behavioral and Social Science	3
	16-17		17
Fourth Year –27-32 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
STEM 4010: Project-Based Instruction	3	STEM 4020r: Apprentice Teaching	10-12
EDUC 4170: Technology & Learning	3	EDUC 4420: Professional Seminar	2
GEOL 3070: Geology of Tennessee	3	GEOL Senior Research Experience	1-3
GEOL Senior Research Experience	2		
Humanities and Fine Arts	3-4		12.17
Completed	14-15		13-17
Completed: Graduation Requirements:	Hrs	Degree Requirements:	Hrs
121 Total Hours	1115	27-33 General Education Hours	1113
	+		+
39 Upper Division (3000-4000) Hours 30 Hours at UTC	+	104-108 Program (Major) Hours Minor (Not Required)	
45 Hours at 4-year Institution		Elective Hours (Not Required)	