

Earth Space Science

Typical 4-Year Plan

(for students who matriculate prior to Fall 2027
& formally admitted after 7/1/2025)

First-Year			
Fall Term		Spring Term	
Course	Units	Course	Units
SEMS110 Intro to STEM Teaching I [fall only]	1	SEMS 120 Intro to STEM Teaching II [spring only]	1
CHEM 131 General Chemistry I and CHEM 131L General Chemistry I Lab (Core Category 7)	3 1	MATH 115 Basic Math for the Sciences or MATH 119 Pre-Calculus or MATH 211 Calculus for Applications or MATH 273 Calculus I (Core Category 3)	3 – 4
GEOL 121 Physical Geology	4	GEOL 123 Historical Geology [spring only]	4
BIOL 120 Principles of Biology and BIOL 120L Principles of Biology Lab (Core Category 8)	3 1	ENGL 102 (Core Category 2)	3
TSEM 102 (Core Category 1)	3	Core Curriculum 4,6,9,10,11,12,14	3
		Core Curriculum 4,6,9,10,11,12,14	3
Total	16	Total	17-18

Sophomore Year			
Fall Term		Spring Term	
Course	Units	Course	Units
SEMS 230 Knowing and Learning	3	SEMS 240 Classroom Interactions	3
ASTR 261 (Core Category 8)	4	PHYS 212 General Physics II	4
PHYS 211 General Physics I	4	Core Curriculum 4,6,9,10,11,12,14	3
SEMS 250 Perspectives on Science & Math (Core Category 5)	3	Core Curriculum 4,6,9,10,11,12,14	3
SEMS 260 Diversity & Difference in STEM Classroom (Core Cat 13) [fall only]	3	Core Curriculum 4,6,9,10,11,12,14	3
Total	17	Total	16

Junior Year			
Fall Term		Spring Term	
Course	Units	Course	Units
Core Curriculum 4,6,9,10,11,12,14	3	SCED 461 Teaching Reading in the Secondary Content Areas	3
GEOL 357 Physical Oceanography [fall only]	3	GEOL 305 Environmental Geology [spring only]	4
GEOG 373 Climatology or GEOG 377 Meteorology	3	Geosciences or Geography Elective	3–4
SCED 460 Using Reading & Writing in the Secondary Schools	3	Core Curriculum 4,6,9,10,11,12,14	3
GEOL 331 Mineralogy [fall only]	4		
Total	16	Total	13-14

Senior Year			
Fall Term		Spring Term	
Course	Units	Course	Units
SEMS 498 Internship in Mathematics and Science Secondary Education [fall only]	6	SCIE 393 Student Teaching in Secondary Education – Science [spring only]	12
SEMS 375 Science Pedagogy and Applications [fall only]	6	SCIE 430 Seminar in Student Teaching – Science [spring only]	1
Total	12	Total	13

The minimum number of units required for graduation is 120