Mathematics Secondary Education
Typical Four-Year Sequence

Freshman Year

Fall Term		Spring Term	
Course	**Units**	**Course**	**Units**
SEMS110 Introduction to STEM Teaching I: Inquiry Approaches to Teaching	1	SEMS 120 Introduction to STEM Teaching II: Inquiry-Based Lesson Design	1
MATH 273 Calculus I	4	MATH 265 Elementary Linear Algebra	4
TSEM 102 **(Core Category 1)**	3	MATH 274 Calculus II **(Core Category 3)**	4
Core Curriculum	3	ENGL 102 **(Core Category 2)**	3
Core Curriculum	3	Core Curriculum	3
Core Curriculum	3		
Total	**17**	**Total**	**15**

Sophomore Year

Fall Term		Spring Term	
Course	**Units**	**Course**	**Units**
SEMS 230 Knowing and Learning	3	SEMS 240 Classroom Interactions	3
MATH 267 Introduction to Abstract Mathematics	4	MATH 369 Intro to Abstract Algebra	4
MATH 275 Calculus III	4	PHYS 241 General Physics I **(Core Category 7)**	4
MATH 223 PCK for MS Math	2	Core Curriculum	3
SEMS 260 Diversity/ Difference **(Core Category 13)**	3	Core Curriculum	3
Total	**16**	**Total**	**17**

- **Students who take PHYS 242 as a math content elective can reduce the total credit count by 3 credits since the course satisfies Core 8.**
- **The combination of MATH 320 and PHYS 242 cannot be used to satisfy the two math content electives**
- **Students matriculating in Fall 2024 or later will be required to take SEMS 260 (Core 13)**

Junior Year

Fall Term		Spring Term	
Course	**Units**	**Course**	**Units**
SEMS 250 Perspectives on Science and Math **(Core Category 5)**	3	SEMS 370 Project-Based Instruction	3
MATH 330 Introduction to Statistical Methods	4	MATH 310 Functions and Modeling **(Core 9)**	3
MATH 353 Euclidean and Non-Euclidean Geometries	3	MATH 420 Applications of Technology for Secondary School Teachers	3
SCED 460 Using Reading & Writing in the Secondary Schools	3	Mathematics Content Elective	3 – 4
Core Curriculum	3		
Total	**16**	**Total**	**12-13**

Senior Year

Fall Term		Spring Term	
Course	**Units**	**Course**	**Units**
SEMS 498 Internship in Mathematics and Science Secondary Education	3	MATH 426 Student Teaching in Secondary Education – Mathematics	12
MATH 423 Teaching Mathematics in the Secondary Schools	3		
Mathematics Content Elective	3 – 4	SEMS 430 Seminar in Apprentice Teaching	1
SCED 461 Teaching Reading in the Secondary Content Areas	3		
Total	**12-13**	**Total**	**13**

- **The total number of units required for graduation is 118-120.**