Computer and Mathematical Sciences Secondary Education
Typical 4-Year Plan

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

Freshman Year

Fall Term	Units	Spring Term	Units
Course	**Units**	**Course**	**Units**
SEMS110 Introduction to STEM Teaching I **[fall-only]**	1	SEMS 120 Introduction to STEM Teaching II **[spring-only]**	1
MATH 273 Calculus I	4	MATH 274 Calculus II **(Core Category 3)**	4
COSC 109 Computers & Creativity **(Core Category 4)**	3	COSC 175 General Computer Science	4
TSEM 102 **(Core Category 1)**	3	ENGL 102 **(Core Category 2)**	3
SEMS 250 Perspectives on Science and Math **(Core Category 5)**	3	Core Curriculum 6,8,10,11,12	3
Total	**14**	**Total**	**15**

Sophomore Year

Fall Term	Units	Spring Term	Units
Course	**Units**	**Course**	**Units**
SEMS 230 Knowing and Learning	3	SEMS 240 Classroom Interactions	3
MATH 265 Elementary Linear Algebra	4	COSC 237: CS II	4
COSC 236: CS I	4	Core Curriculum 7	4
SEMS 260 Diversity & Difference in the STEM Classroom **(Core 13)**	3	Core Curriculum 6,8,10,11,12	3
Core Curriculum 6,8,10,11,12	3	Core Curriculum 6,8,10,11,12	3
Total	**17**	**Total**	**17**

Junior Year

Fall Term	Units	Spring Term	Units
Course	**Units**	**Course**	**Units**
MATH 353 Euclidean and Non-Euclidean Geometries	3	SCED 461 Teaching Reading in the Secondary Content Areas	3
SCED 460 Using Reading & Writing in the Secondary Schools	3	COSC 418 Computer Ethics **(Core Category 14)** Needs junior/senior standing.	3
ITEC 250 Fundamentals of Computer Networks	3	MATH 310 Functions & Modeling **(Core Category 9)** **[spring-only]**	3
COSC 336 Data Structures and Algorithm Analysis	4	MATH 263Discrete Mathematics or MATH 267 Intro to Abstract Mathematics	3-4
Core Curriculum 6,8,10,11,12	3	MATH 330 Intro to Statistical Methods	4
Total	**16**	**Total**	**16-17**

Senior Year

Fall Term	Units	Spring Term	Units
Course	**Units**	**Course**	**Units**
SEMS 498 Internship in Mathematics and Science Secondary Education	6	MATH 426 Internship in Secondary Education – Mathematics	6
MATH 423 Teaching Mathematics in the Secondary Schools	4	COSC 492 Internship in Secondary Education – Computer Science	6
COSC 482 Teaching Computer Science in the Secondary Schools	3	SEMS 430 Seminar in STEM Secondary Education	1
Total	**13**	**Total**	**13**

TU Core Categories <u>not satisfied</u> by major: 1, 2, 6, 7, 8, 10, 11, 12
The minimum total number of required units for graduation is 121.