



MASTER OF ARTS IN EDUCATION: MATH & SCIENCE EDUCATION OPTION

Requirements (48 units)

The cohort program for K-12 teachers is designed to enhance their mathematics and science pedagogical content knowledge for the 21st century. The Common Core Standards for Mathematics and the Next Generation of Science Standards reflect society's need for a deep understanding of mathematics and science. Implementation of these standards will require a dynamic shift in the way school mathematics and science is taught. The M.A. in Education: Mathematics/Science Option provides the knowledge and skills to enhance learning in Foundational Mathematics (i.e., algebra, geometry, and probability and statistics) and General Science (i.e., earth, life, and physical sciences).

All candidates are encouraged to meet with their program advisor to develop their course plan. The following EXAMPLE course sequence is effective Fall 2013, and is subject to change at any time.

Year 1 Courses:

Quarter 1 (Fall)	Quarter 2 (Winter)	Quarter 3 (Spring)
ESTM 624 Curriculum & Pedagogy in Elementary Mathematics (4 units)	ESTM 625 Curriculum & Pedagogy in Algebra (4 units)	ESTM 626 Curriculum & Pedagogy in Geometry (4 units)
EDSC 623 The Science Curriculum (Earth Science (4 units)	EDSC 647 Advanced Topics in Teaching Science I: Life Science (4 units)	EDSC 648 Advanced Topics in Teaching Science II: Physical Sciences (4 units)
		EDUC 605 Foundations in Education (4 units)

Year 2 Courses:

Quarter 1 (Fall)	Quarter 2 (Winter)	Quarter 3 (Spring)
EDSC 634 Current Research in Science Classroom ^a (4 units)	EDSC 643 Assessment in the Science Classroom ^a (4 units)	ESTM 628 Integrating Mathematics & Science Education (4 units)
EDUC 607 Introduction to Educational Research (4 units)	EDSC 644 Inquiry Teaching & Learning in the Science Classroom ^a (4 units)	EDSC 999 Comprehensive Examination ^b (0 units)

^a These courses will also include relevant work pertaining to the mathematics classroom.

^b In addition to the Comprehensive Examination Option, students may choose a Thesis Option.