Science, Technology, Engineering, and Mathematics Education (MS): Mathematics and Statistics Education Concentration

Degree Requirements

Degrees earned will be distributed as: "Science, Technology, Engineering, and Mathematics Education (MS): Mathematics and Statistics Education Concentration"

Code	Title	Hours
Core Courses		**6**
EMS 573	Design of Tools and Learning Environments in STEM Education (required)	
ECI 510	Research Applications In Curriculum and Instruction [1]	
Specialty Courses		**27**
Mathematics Education courses (12 hours)		
Select four courses from the following list		
EMS 510	Interactions In the Mathematics Classroom	
EMS 513	Teaching and Learning of Algebraic Thinking	
EMS 514	Teaching and Learning of Geometric Thinking	
EMS 519	Teaching and Learning of Statistical Thinking	
EMS 580	Teaching Mathematics with Technology	
EMS 581	Advanced Applications of Technology in Mathematics Education	
EMS 592	Special Problems In Mathematics Teaching	
Speciality Content Courses (15 hours) [2]		
Select from the following list of courses		
MA 501	Advanced Mathematics for Engineers and Scientists I	
MA 502	Advanced Mathematics for Engineers and Scientists II	
MA 508	Survey of Geometry	
MA 510	Selected Topics In Mathematics For Secondary Teachers	
MA 511	Advanced Calculus I	
MA 513	Introduction To Complex Variables	
MA 523	Linear Transformations and Matrix Theory	
MA 580	Numerical Analysis II	
MA 591	Special Topics	
ST 505	Applied Nonparametric Statistics	
ST 511	Statistical Methods For Researchers I	
ST 512	Statistical Methods For Researchers II	
Research Experience Course:		**3**
EMS 695	Master's Thesis Research	

Note: With advisor approval, students' thesis project may be a literature review, pilot or action research study - (started in EMS or TDE course and then expanded upon) or a Research Proposal.

Total Credit Hours **36**

[1] Other research methods course as approved by academic advisor (e.g., ST 511)

[2] Students can take up to 6 credit hours of 400-level MA or ST courses.

Faculty

Full Professors

Margaret R. Blanchard

Carla Johnson

Melissa Gail Jones

Soonhye Park

Eric N Wiebe

Associate Professors

Sarah J. Carrier

Cesar Delgado

Assistant Professors

K. C. Rogis Busch

Practice/Research/Teaching Professors

W. Matthew Reynolds

Emeritus Faculty

Glenda S. Carter

John H. Wheatley