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

Degree Requirements

Degrees earned will be distributed as: "Science, Technology, Engineering, and Mathematics Education (MS): Science 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]	
Science Education Concentration		**27**
Science Education Courses (12 hours)		
Select four courses from the following list		
EMS 521	Advanced Methods in Science Education I	
EMS 522	Advanced Methods in Science Education II	
EMS 531	Introduction to Research in Science Education	
EMS 550	Teaching Environmental Education	
EMS 551	Learning in Informal Contexts: Theory to Practice	
EMS 552	Learning in Informal Contexts: Evaluation	
EMS 575	Foundations Of Science Education (or EMS 775)	
EMS 731	Fundamentals of Research in Science Education: Qualitative and Quantitative Inquiry	
EMS 594	Special Problems In Science Teaching	
Specialty Science Education Content Courses (15 hours)		
Select from the following list of courses		
BIO 592	Topical Problems	
BCH 553	Biochemistry of Gene Expression	
NTR 515	Comparative Nutrition	
NTR 624	Topical Problems In Nutrition	
FOR 595	Special Topics	
FOR 501	Dendrology	
HS 541	Plant Breeding Methods	
MEA 517	Fundamentals of Climate Change Science	
MEA 582	Geospatial Modeling	
EA 501	Environmental Stressors	
EA 503	Environmental Exposure Assessment	
PY 552	Condensed Matter Physics I	
PY 582	Matter & Interactions for Teachers 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] Or another research methods course as approved by advisor (e.g., ST 511)

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