

Learning and Teaching in STEM (PhD): Engineering and Technology Education

Degree Requirements

Code	Title	Hours
College Scholar Leader Core Courses		6
ED 755	Scholar Leader: Diversity and Equity in Schools and Communities	
ED 756	Scholar Leader: Systemic Change in Education	
College Research Methods Courses		15
Required Introductory Research Methods Courses		6
ED 710	Applied Quantitative Methods in Education I	
ED 730	Introduction to Qualitative Research in Education (or equivalent)	
Advanced Research Methods Courses (select one course from list below)		3
ED 711	Applied Quantitative Methods in Education II	
ED 731	Advanced Qualitative Research and Data Analysis in Education ¹	
ED 750	Mixed Methods Research in Education	
Advanced Research Methods Electives		6
Select two courses from the list above or other advanced research methods courses approved by the student advisor.		
Dissertation Research		9
EMS 895	Doctoral Dissertation Research	
Learning and Teaching in STEM Education Core Courses		6
EMS 791	Contemporary Research and Critical Issues in STEM Education	
EMS 794	Special Problems in Science Teaching	
Engineering and Technology Education Specialization Courses		15
TED 751	Technology Education: A Discipline	
TED 752	Curricula for Emerging Technologies	
TED 755	Developing and Implementing Technology Education	
TED 756	Planning of Change in TED	
TED 758	Teaching Creative Problem Solving	
Specialty Courses to deepen understanding in focus area in conjunction with the academic committee		9
Total Hours		60

¹ Students may also select from a design-based research course or courses in the Department of Statistics or Psychology at the level 500 or above (e.g., ST 505, PSY 880) approved in conjunction with the academic committee.

Faculty

Full Professors

Margaret R. Blanchard

Sarah J. Carrier

Aaron Catron Clark

Jo-Ann D. Cohen

Karen Flanagan Hollebrands

Jessica Heather Hunt

Carla Johnson

Melissa Gail Jones

Hollylynn Stohl Lee

Soonhye Park

Associate Professors

Cesar Delgado

Kristin Collette Rogis Busch

Cameron Denson

Erin Krupa

Temple A. Walkowiak

Assistant Professors

Robin Keturah Anderson

Sunghwan Byun

Ruby Ellis

Tamecia Raishaun Jones

Daniel Kelly

Practice/Research/Teaching Professors

Cynthia Page Edgington

Matt Reynolds

Emeritus Faculty

Eric Wiebe