

PhD in Curriculum & Instruction

The Mathematics Education Doctoral Program in the School of Education focuses on original research, preparing students for research and teaching in a context that is rigorous, collegial, and cooperative.

Concentration (24+ credit hours)

- Critical Analysis of Mathematics Education Research (EDCI 5734)
- Reseseach on Mathematical Knowledge & Learning (MATH 5624)
- Topics in Mathematics Education (EDCI 5714)
- Research in Undergraduate Mathematics Education (MATH 5634)

Additional courses in Teaching and Learning (e.g., EDCI) will be decided upon in consultation with your advisor. Past favorites have been:

- Exploring Teacher Education Curriculum (EDCI 5784)
- STEM Education Foundations (EDCI 5804)
- STEM Education Pedagogy (EDCI 5814)
- STEM Education Trends & Issues (EDCI 5824)

Foundations of Education (12+ credit hours)

- Constructivism and Education (EDEP 6224)
- Learning & Cognition (EDEP 5114)

Additional courses in Foundations (e.g., EDEP) will be decided upon in consultation with your advisor. Past favorites have been:

- Schooling in American Society (EDCI 5104)
- Analysis of Educational Concepts (EDCI 6024)
- Motivation and Cognition (EDEP 6444)
- Cognitive Processes (EDEP 6114)

Research Methods (18+ credit hours)

- Qualitative Methods in Educational Research I & II (EDRE 6504, 6524)
- Quantitative Research Methods in Education I & II (EDRE 6605, 6606)

Additional courses in Educational Research (e.g., EDRE) will be decided upon in consultation with your advisor. Past favorites have been:

- Introduction to Mixed Methods (EDRE 5674)
- Advanced Statistics for Education (EDRE 6634/STAT 6634)
- Hierarchical Linear Modeling (EDRE 6694)
- Multivariate Statistics for Applications to Educational Problems (EDRE 6654)

Mathematical Content Courses (6+ credit hours)

Courses in Mathematics (MATH) or Statistics (STAT) will be decided upon in consultation with your advisor. Past favorites have included the following:

- Mathematics for Secondary Teachers I (MATH 4625)
- Mathematics for Secondary Teachers II (MATH 4626)

Research & Dissertation (EDCI 7994, 30+ hours)