MATHEMATICS EDUCATION (PH.D.)

https://ceps.unh.edu/mathematics-statistics/program/phd/mathematics-education

Description

The program is designed to provide students with depth and breadth in the fields of both mathematics education and mathematics, preparing students for educational and research leadership. The program is designed to advance forefront knowledge in mathematics education.

Admission Requirement

Applicants to the Ph.D. in Mathematics Education degree must have BA or BS from an accredited college or university. Successful candidates typically have a bachelor's degree in mathematics or mathematics education and/or advanced coursework in mathematics.

Applying

Please visit the Graduate School website for detailed instructions about applying to the program.

Requirements

Students are advanced to candidacy after meeting the following requirements:

Code	Title	Credits
Required Courses		
Advanced Coursework in Mathematics		
MATH 951	Algebra I	3
MATH 952	Algebra II	3
MATH 953	Analysis I	3
MATH 954	Analysis II	3
MATH 955	Topology I	3
Advanced Coursework in the Major Field (Mathematics Education)		
MATH 958	Foundations of Math Education	1
MATH 959	Introduction to Research Design in STEM Education	3
MATH 968	Topics in Mathematics Education I (A)	3
MATH 968	Topics in Mathematics Education I (B)	3
MATH 978	Topics in Mathematics Education II (at least two semesters)	6
Two additional courses in research methods (one qualitative, one quantitative), typically:		
EDUC 904	Qualitative Inquiry in Research	4
MATH 835	Statistical Methods for Research	3

Successful completion of written comprehensive examinations in algebra, analysis, mathematics education and an elective subject.

Successful completion of a minor program of study (usually a related one, such as educational psychology or research methodology, but possibly in an area of mathematics) followed by the minor presentation.

Successful completion of a dissertation proposal defense in the major field of mathematics education.

Experience in teaching equivalent to at least half-time for one year typically through assistantship assignments.

Dissertation

Students must complete and submit a dissertation that involves original research in mathematics education.

Student Learning Outcomes

Program Learning Outcomes

- Demonstrate deep knowledge of graduate level mathematics content: algebra, analysis, topology.
- Demonstrate competency in the minor field of study different from, but related to mathematics education (e.g., mathematics, statistics, linguistics, research methods, other sciences, STEM disciplines).
- Demonstrate the ability to conduct and communicate foundations of mathematics education research, theories of mathematics teaching and learning, and mathematics curriculum.