



**Doctor of Philosophy in Curriculum and Instruction:
Mathematics Education**

Program Director: Dr. Tina Heafner (theafner@charlotte.edu)

Concentration Coordinator: Dr. Allison McCulloch (allison.mcculloch@charlotte.edu)

Course #	Title	Credit Hours
Core Courses		15
EDCI 8620	Pro-Seminar in Curriculum, Instruction, and Educational Leadership	3
Urban Core Courses		12
<i>Select from the following.</i>		
EDCI 8126	Comparative Education	3
EDCI 8180	Critical Issues and Perspectives in Urban Education	3
EDCI 8182	Power, Privilege and Education	3
EDCI 8184	Social Theory and Education	3
EDCI 8186	Globalization, Urbanization and Urban Schools	3
EDCI 8201	Perspectives in Immigration and Urban Education	3
EDCI 8206	Globalization, Communities, and Schools	3
EDCI 8330	History of Urbanization and Its Impact on Schooling	3
<i>Students may enroll in 3 credit hours of courses outside of this list with approval of the Program Advisor and Program Director.</i>		
Research Methodology Courses		15
<i>Required Courses:</i>		
RSCH 8110	Descriptive and Inferential Statistics	3
RSCH 8210	Applied Research Methods	3
GRAD 8990	Academic Integrity	
<i>All Ph.D. students are required to register for GRAD 8990 Academic Integrity in the first semester.</i>		
<i>Choose three or more of the following:</i>		
RSCH 8111	Qualitative Research Methods	3
RSCH 8112	Survey Research Methods	3
RSCH 8113	Single-Case Research	3
RSCH 8120	Advanced Statistics	3
RSCH 8121	Advanced Qualitative Methods	3
RSCH 8131	Interviewing as Qualitative Inquiry	3
RSCH 8140	Multivariate Statistics	3
RSCH 8150	Structural Equation Modeling	3

RSCH 8160	Hierarchical Linear Models in Education	3
RSCH 8196	Program Evaluation Methods	3
RSCH 8197	Design and Analysis of Experimental and Quasi-Experimental Evaluations	3
RSCH 8220	Educational and Psychological Measurement	3
RSCH 8230	Theory and Applications of Measurement	3
RSCH 8410	Internship in Educational Research	3
RSCH 8890	Special Topics in Research	3

Five courses are required but not necessarily sufficient. Additional courses not listed require program director approval.

Mathematics Specialization Courses	21
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Required Courses (15 Credit Hours):

EDCI 8112	Theoretical Foundations of Learning Mathematics	3
EDCI 8113	Research in Mathematics Education	3
EDCI 8114	Advanced Topics in Mathematics Education	3
EDCI 8115	Issues in the Teaching of Mathematics	3
EDCI 8160	Readings in Mathematics Education	3

Select from the following. (Minimum 6 Credit Hours.) Students may enroll in 3 credit hours of graduate-level courses outside of the below list with approval of the Program Advisor.

EDCI 8004	Topics in Analysis	3
EDCI 8008	Topics in Geometry and Topology	3
EDCI 8010	Topics in Mathematics Education	3
EDCI 8101	Foundations in Mathematics	3
EDCI 8102	Real Analysis for Secondary Mathematics Teachers	3
EDCI 8103	Computer Techniques and Numerical Methods	3
EDCI 8106	Modern Algebra for Secondary Mathematics Teachers	3
EDCI 8107	Linear Algebra for Secondary Mathematics Teachers	3
EDCI 8108	Statistics and Data Literacy in K-12 Education	3
EDCI 8118	Non-Euclidean Geometry	3
EDCI 8460	Internship in Urban Education	3
EDCI 8690	Conceptual and Theoretical Frameworks Seminar	3
EDCI 8860	Independent Study in Mathematics Education	3

Required for Dissertation	9
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EDCI 8699*	Dissertation Proposal Seminar	3
EDCI 8999**	Dissertation Research	6

**Contact the Program Director for approval to enroll in EDCI 8699 and EDCI 8999. To be taken after successful completion of the comprehensive examinations and pre-proposal meeting with committee members.*

*****Students must be admitted to candidacy to enroll in EDCI 8999. A minimum of 6 credit hours of dissertation research is required. Additional hours may be taken to complete the dissertation process.***



<i>Minimum Total Credits</i>	60
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