

Doctor of Philosophy in Curriculum and Instruction Mathematics Education: ADVANCED STANDING

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

Course #	Title	Credit Hours		
Urban Founda	ations Core Courses	12		
EDCI 8620	Pro-Seminar in Curriculum, Instruction, and Educational Leadership	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 (Optional, but strongly recommended)	3		
Research Met	9			
Required Courses:		6		
RSCH 8110	Descriptive and Inferential Statistics	3		
RSCH 8210	Applied Research Methods	3		
If an equivalent research course was completed in an approved mathematics master's degree, Advanced Standing students should work with their Program Advisor to identify an additional elective research course from the list below and submit an academic petition for approval. Consultation with the program director prior to submitting the academic petition is required.				
GRAD 8990	Academic Integrity	0		
All Ph.D. students are required to register for GRAD 8990 Academic Integrity in the first semester.				
Choose one of the following:		3		
Concentration Coordinator consultation is required to enroll in the below courses. Selection of 1 research course elective with approval of Program Advisor. Course selection should align with dissertation plans.				
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 8890	Special Topics in Research	3		
Additional courses not listed require program director approval				

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Mathematics	Specialization Courses	18		
Required Courses: In consultation with Concentration Coordinator or Program Advisor, select from the following courses.				
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 Secondary School Mathematics Education	3		
EDCI 8160	Readings in Mathematics Education	3		
Concentration Elective Courses (3 credit hours): Students may select from the following, in consultation with 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 of Mathematics	3		
EDCI 8102	Real Analysis for Secondary Mathematics Teachers	3		
EDCI 8103	Computer Techniques and Numerical Methods	3		
EDCI 8105	Problem Solving in Discrete Mathematics	3		
EDCI 8106	Modern Algebra for Secondary Mathematics Teachers	3		
EDCI 8107	Linear Algebra for Secondary Mathematics Teachers	3		
EDCI 8118	Non-Euclidean Geometry	3		
EDCI 8860	Independent Study in Mathematics Education	3		

For Advanced Standing, courses taken at the master's 5000 or 6000-level cannot be repeated at the doctoral 8000-level to meet concentration requirements. No transfer credit hours are allowed in Advanced Standing. Students may enroll in graduate-level credit outside of the above list with approval of the program director.

Required for Dissertation		9
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, appointment of the dissertation committee, 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.

Advanced Standing Minimum Total Credits

48

A minimum of 48 hours is required but not necessarily sufficient. Additional courses may be recommended by Program Advisor for the Ph.D. in Curriculum and Instruction.