

# EDUCATION: MATHEMATICS EDUCATION, PHD

**Requirements for Students Matriculating in or before Academic Year 2024-2025.** Learn more about Graduate College Academic Regulation 7.0 (<http://catalog.okstate.edu/graduate-college/#70>).

**Total Hours:** 69 (Beyond the Master's Degree)

Code	Title	Hours
<b>Common Program Core</b>		
SCFD 6983	Diversity and Equity Issues in Education	3
SCFD 6113	Theoretical Foundations of Inquiry	3
CIED 6503	Doctoral Seminar	3
<b>Hours Subtotal</b>		<b>9</b>
<b>Extended Inquiry</b>		
At least six of these hours, selected from courses such as those listed below, should be comprised of the same type of research method (i.e., quantitative, qualitative, historical, etc.). Students should work with their advisory committee to select the appropriate 12 hours for their program of study.		12
CIED 6073	Advanced Pedagogical Research	
CIED 6253	Designing and Conducting Mixed Methods Research	
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6023	Psychometric Theory	
REMS 6033	Factor Analysis in Behavioral Research	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
REMS 5963	Computer Applications in Nonparametric Data Analyses	
SCFD 6123	Qualitative Research I	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
MATH 5913	Introduction to Research in Mathematics Education	
MATH 6923	Research in Undergraduate Mathematics Education	
<b>Hours Subtotal</b>		<b>12</b>
<b>Cognate Area</b>		
The doctoral advisory committee will work with individual students to select the most appropriate courses to enhance their knowledge within their specializations.		9
<b>Hours Subtotal</b>		<b>9</b>
<b>Independent Research</b>		
CIED 6000	Doctoral Dissertation	15
<b>Hours Subtotal</b>		<b>15</b>
<b>Specialization - Mathematics Education</b>		
<i>Required Courses</i>		
SMED 6223	Instruction and Learning in Science and Mathematics Education	3

SMED 6233	Affective Issues in Teaching Mathematics and Sciences	3
SMED 6753	Research in Mathematics and Science Education	3
<i>Elective Courses</i>		
Select 15 hours from the following:		15
CIED 5850	Directed Study	
CIED 6910	Practicum	
CIED 6850	Directed Reading	
SMED 5253	Teaching Rational Number Concepts, Proportional Reasoning, and Classroom Interactions	
SMED 5263	Assessment and Evaluation in School Mathematics	
SMED 5270	Practicum in School Mathematics	
SMED 5273	Number Concepts and Assessment at the Elementary Level (PK-6)	
SMED 5283	Problem-Centered Learning in Mathematics	
SMED 5293	Teaching and Learning Mathematics in Technology	
SMED 5613	Effective Teaching of Mathematics in the Secondary School	
SMED 5750	Seminar in Mathematics Education	
SMED 5913	Teaching Geometry and Spatial Visualization	
SMED 5923	Teaching Algebra and Mathematical Tasks	
SMED 5933	Teaching Data and Probability in Schools	
SMED 5943	Mathematics Leadership and Coaching	
<b>Hours Subtotal</b>		<b>24</b>
<b>Total Hours</b>		<b>69</b>

## Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2024-2025 Doctor of Philosophy (PhD) Degree Program Requirements (<http://catalog.okstate.edu/graduate-college/>). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.