

MATHEMATICS, PHD

Requirements for Students Matriculating in or before Academic Year

2025-2026. Learn more about Graduate College Academic Regulation 7.0 (<https://catalog.okstate.edu/graduate-college/#70>).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Core Courses		
Select 15 hours from one of the following tracks:		15
<i>Applied</i>		
MATH 5553	Numerical Analysis for Linear Algebra	
MATH 5143	Real Analysis I	
MATH 5283	Complex Analysis I	
MATH 5543	Numerical Analysis for Differential Equations	
MATH 5233	Partial Differential Equations	
<i>Pure</i>		
MATH 5023	Advanced Linear Algebra	
MATH 5143	Real Analysis I	
MATH 5283	Complex Analysis I	
MATH 5613	Algebra I	
MATH 5313	Geometric Topology	
<i>Mathematics Education</i>		
MATH 5023	Advanced Linear Algebra	
Select 9 hours from the following:		
MATH 5143	Real Analysis I	
MATH 5283	Complex Analysis I	
MATH 5613	Algebra I	
MATH 5313	Geometric Topology	
MATH 5543	Numerical Analysis for Differential Equations	
MATH 5233	Partial Differential Equations	
Select one of the following:		
STAT 5023	Statistics for Experimenters II	
STAT 5063	Statistical Machine Learning with R	
Hours Subtotal		15
Additional Math Courses		
Select 12 hours from track used for core courses.		12
<i>Applied</i>		
In addition to the core course requirements, every plan of study must contain at least 12 hours of graduate courses in the mathematical sciences (mathematics, statistics, or computer science).		
<i>Pure</i>		
In addition to the core course requirements, every plan of study must contain at least 12 hours of graduate courses in the mathematical sciences (mathematics, statistics, or computer science).		
<i>Mathematics Education</i>		
MATH 5913	Introduction to Research in Mathematics Education	
MATH 6923	Research in Undergraduate Mathematics Education	

Select 6 hours from the following:

SCFD 6113	Theoretical Foundations of Inquiry
SCFD 6123	Qualitative Research I
EPSY 5463	Psychology of Learning
REMS 5953	Statistical Methods in Education
Hours Subtotal	12
Preliminary Research Project	
MATH 6010	Advanced Seminar in Mathematics (Reading course with advisor)
MATH 6090	Doctoral Research Project
Hours Subtotal	6
Additional Graduate Courses	
Combination of electives and dissertation hours to total 27 hours.	
<i>Electives</i>	
Select 3-12 hours.	
<i>Dissertation</i>	
Select 15-24 hours.	
Hours Subtotal	27
Total Hours	60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2025-2026 Doctor of Philosophy (PhD) Degree Program Requirements (<https://catalog.okstate.edu/graduate-college/>). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.