

# Mathematics Doctorate

## Department Information

- **Department Web Site:**  
ndsu.edu/math (<http://ndsu.edu/math/>)
- **Application Deadline:**  
Early review begins January 31 rolling through March 31 or until full.
- **Credential Offered:**  
Ph.D.
- **Program Overview:**  
[ndsu.edu/programs/graduate/mathematics](http://ndsu.edu/programs/graduate/mathematics) (<http://ndsu.edu/programs/graduate/mathematics/>)

**Apply Now ([https://ndsugrad.my.site.com/Application/TX\\_SiteLogin/?startURL=/Application/TargetX\\_Portal\\_\\_PB](https://ndsugrad.my.site.com/Application/TX_SiteLogin/?startURL=/Application/TargetX_Portal__PB))**

Code	Title	Credits
<b>Foundational Courses</b>		
Algebra		
MATH 720	Algebra I	3
MATH 721	Algebra II	3
MATH 726	Homological Algebra	3
Analysis		
MATH 750	Analysis	3
MATH 754	Functional Analysis	3
MATH 756	Harmonic Analysis	3
Applied Mathematics		
MATH 760	Ordinary Differential Equations I	3
MATH 784	Partial Differential Equations I	3
Combinatorics		
MATH 736	Enumerative Combinatorics	3
MATH 737	Algebraic Combinatorics	3
Geometry/Topology		
MATH 746	Topology I	3
MATH 747	Topology II	3
<b>Graduate Seminar</b>		<b>3</b>
MATH 790	Graduate Seminar	
<b>Doctoral Research</b>		<b>6</b>
MATH 899	Doctoral Dissertation	

- Subject to the approval of the supervisory committee, at most 12 of the required 42 credit hours may be earned in 600-level mathematics courses or in courses outside the Mathematics Department. Credits used to satisfy the requirements of a master's degree at NDSU may be included in the 90 credits hours required for the doctoral degree
- A student entering the doctoral program with a master's degree from another institution need only complete 60 credit hours to complete the Ph.D. degree. Half of these 60 credits must be in courses numbered 700-789.
- A grade of Ph.D. Pass in four written preliminary examinations offered by the department.

## Admission and Application Requirements

Graduate School admission and application requirements are found on the Admission Information (<http://catalog.ndsu.edu/graduate/admission-information/>) page. In addition, the following are also required:

- A cumulative grade point average (CGPA) of at least 3.0 or equivalent in all advanced mathematics courses at the baccalaureate level
- Meet the English proficiency requirements (<https://catalog.ndsu.edu/graduate/admission-information/#internationalapplicantstext>) for applicants