

MATHEMATICS PHD

Degree Requirements

The following requirements are in addition to, or further elaborate upon, those requirements outlined in The Graduate School Policy Guide (<https://catalogs.northwestern.edu/tgs/academic-policies-procedures/>).

PhD

Total Units Required: 21

| Course | Title |
|-------------------------------|-------------------------------------|
| Core Courses (9 units) | |
| MATH 410-1 | Analysis |
| & MATH 410-2 | and Analysis |
| & MATH 410-3 | and Introduction to Modern Analysis |
| MATH 440-1 | Geometry and Topology |
| & MATH 440-2 | and Geometry and Topology |
| & MATH 440-3 | and Geometry and Topology |
| MATH 470-1 | Algebra |
| & MATH 470-2 | and Algebra |
| & MATH 470-3 | and Algebra |

Elective Courses (12 units)

Notes

- A student who has passed the qualifying exam may register for TGS 500-0 Funded Doctoral Study beginning in the third year.

Other PhD Degree Requirements

- **Examinations:** three written preliminary examination in the core courses of Analysis, Geometry/Topology, and Algebra; oral qualifying examination
- **Research/Projects:** see PhD Dissertation below
- **PhD Dissertation:** original, independent research
- **Final Evaluations:** defense of dissertation