

STATISTICS 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: 14-15

Required Coursework

Course	Title
STAT 350-0	Regression Analysis
STAT 351-0	Design and Analysis of Experiments
STAT 420-1 & STAT 420-2 & STAT 420-3	Introduction to Statistical Theory & Methodology-1 and Introduction to Statistical Theory & Methodology-2 and Introduction to Statistical Theory & Methodology-3
STAT 425-0	Sampling Theory and Applications (Note: should STAT 425-0 not be offered, students will be expected to take STAT 325-0 instead to satisfy the requirement)
MATH 450-1	Probability Theory & Stochastic Analysis
MATH 450-2 or IEMS 460-1 & IEMS 460-2	Probability Theory and Stochastic Analysis Stochastic Processes I and Stochastic Processes II

Electives (300- and 400-level graduate courses in Statistics): 6 approved courses. At least 2 must be 400 level courses

Other PhD Degree Requirements

- **Examinations:** qualifying examination taken at the beginning of the second year; prospectus completed by the end of third year
- **PhD Dissertation:** based on independent research
- **Final Evaluations:** oral defense of dissertation

En Route Master's

Optional MS Degree for Statistics PhD Students

Students admitted to the PhD program can obtain an optional MS (master of science) degree en route. The MS degree requires 12 courses. Students choose from 300 and 400 level courses offered by the Statistics Department. Required are:

Course	Title
STAT 350-0	Regression Analysis
STAT 351-0	Design and Analysis of Experiments
STAT 420-1 & STAT 420-2 & STAT 420-3	Introduction to Statistical Theory & Methodology-1 and Introduction to Statistical Theory & Methodology-2 and Introduction to Statistical Theory & Methodology-3
STAT 425-0	Sampling Theory and Applications (Note: should STAT 425-0 not be offered, students will be expected to take STAT 325-0 instead to satisfy the requirement)

6 courses from among other approved 300-level and 400-level Statistics courses, at least 2 must be 400-level

For the optional MS degree, students must also pass the qualifying exam offered at the beginning of the second year of the program. No thesis is required.