

# MATHEMATICAL STATISTICS, DOCTOR OF PHILOSOPHY (PH.D.)

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The M.A. degree is not required for admission to the Ph.D. program.

A doctoral student must complete a minimum of 36 hours of formal courses (at least 27 at the 600/700 level) with an average of B or better; at least 18 of the graduate credits must be taken in Statistics. In addition, the university requires at least 12 hours of STAT899 (Doctoral Research).

**Advance to Candidacy:** In addition to completing the course requirements below, students must pass all 3 qualifying exams in statistics: Applied Statistics, Statistics, and Probability. Or, pass any 2 of the 3 qualifying exams: Applied Statistics, Statistics or Probability, and complete a course sequence of the exam you choose not to take, or complete two additional courses from an approved list. The qualifying requirements may be satisfied by passing three written exams or by satisfactory performance in a specified list of courses. These examinations are given by the Mathematics Department twice a year in January and August. A student may take one or more examinations at a time. The student must pass two examinations by January of his or her third year in the graduate program, and must complete the qualifying requirements by the end of the fourth year. Most full-time students complete the qualifying requirements by the end of the second year or middle of the third year.

If successful in the qualifying requirements, the student must pass an oral examination. Administered by the Statistics faculty, the oral examination usually takes place a year after the student passes the written examination. This examination serves as a test of the student's in-depth preparation in the area of specialization and the student's research potential. Successful completion of the oral exam indicates that the student is ready to begin writing the doctoral dissertation.

**Post-Candidacy:** Complete at least 12 credits of STAT899 Doctoral Dissertation Research and successfully defend a dissertation.

Course	Title	Credits
<b>Core Requirements</b>		
Select 36 credits of coursework <sup>1</sup>		36
Pass the written examination in three fields at the Ph.D. level, including probability and one statistics area		
Pass the final oral examination		
<b>Dissertation Research Requirement</b>		
STAT899	Doctoral Dissertation Research	12
<b>Total Credits</b>		<b>48</b>

<sup>1</sup> At least 27 credits at the 600-700 level and at least 18 credits at the 600-700 level in statistics and probability.