STATISTICS, PH.D.

The Ph.D. degree is designed to prepare the student to teach statistics at the collegiate level, to do independent research, and/or to work as a lead statistician in business or industry.

The profile of a successful Ph.D. applicant includes either a master's degree with excellent performance from an accredited institution, or post baccalaureate with an average GRE verbal in the 65th or higher percentile and an average GRE quantitative in the 80th or higher percentile with an average GPA of 3.30 or higher. He/she will also have a strong math background including 3 semester sequence in calculus, linear algebra, and often real analysis.

Learning Outcomes

- The Ph.D. recipient should have solid knowledge of the advanced theory of statistics and probability.
- The Ph.D. recipient should have the ability to substantially add to the body of knowledge in the field in statistics.
- The Ph.D. recipient who desires a career in academia should have the ability to teach at the collegiate level.
- Doctoral students should complete all required coursework, pass the qualifying exam at the Ph.D. level, then propose, write, and defend their dissertation in a timely manner.

Degree Requirements (63 Post-Baccalaureate Hours)

A total of 63 semester hours of approved course work built around a core of twelve three-credit courses. The remaining 27 credit hours are comprised of 3 hours of Doctoral seminar, 12 hours of Dissertation Preparation and 12 hours of elective courses.

Core Courses (36 Hours)

Course	Title	Credits
STAT 704	Data Analysis I	3
STAT 705	Data Analysis II	3
STAT 712	Mathematical Statistics I	3
STAT 713	Mathematical Statistics II	3
STAT 714	Linear Statistical Models	3
STAT 721	Stochastic Processes	3
STAT 740	Statistical Computing	3
STAT 810	Probability Theory I	3
STAT 811	Probability Theory II	3
STAT 822	Advanced Statistical Inference	3
STAT 823	Large Sample Theory	3
STAT 824	Nonparametric Inference	3
Total Credit Hours		36

Post Master's Degree Requirements

Minimum of 48 hours

A minimum of 48 semester hours of approved course work built around a core of seven three-credit courses. The remaining 27 credit hours are comprised of 3 hours of Doctoral Seminar, 12 hours of Dissertation Preparation and 12 hours of elective courses. Some remedial coursework may be required by the Graduate Director.

Core Courses

Course	Title	Credits
STAT 721	Stochastic Processes	3
STAT 740	Statistical Computing	3
STAT 810	Probability Theory I	3
STAT 811	Probability Theory II	3
STAT 822	Advanced Statistical Inference	3
STAT 823	Large Sample Theory	3
STAT 824	Nonparametric Inference	3
Total Credit Hours		21

Doctoral Seminar (3 Hours)

Course	Title	Credits
STAT 890	Doctoral Seminar	3
Total Credit Hours		3

Dissertation Preparation (12 Hours)

Course	Title	Credits
STAT 899	Dissertation Preparation	12
Total Credit Hours		12

Note: The doctoral dissertation must be written in conjunction with the dissertation preparation (STAT 899).

Up to 9 semester hours may be taken outside of the STAT designator or transferred in from another accredited university with the approval of the Graduate Director. Credit hours used in fulfilling requirements for a previous degree may not be transferred.

Additional Requirements

The progression through the degree program involves three examinations: the admission-to-candidacy exam, usually taken after the first year of study; the comprehensive exam in the form of a dissertation proposal, usually completed near the end of required course work; and the dissertation defense.