STATISTICS

http://www.stat.illinois.edu

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Director of Ph.D. Program: Xiaofeng Shao
Director of M.S. Program: Jeff Douglas
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Major: Statistics
Degrees Offered: M.S., Ph.D.
Graduate Minor: Statistics
Graduate Concentrations: Analytics (M.S. only), Applied Statistics (M.S. only)

Graduate Degree Programs
The Department of Statistics offers graduate study leading to the
Master of Science in Statistics, the Master of Science in Statistics
with specialization in various areas of application, and the Doctor of
Philosophy in Statistics.

Admission
Graduate College admission requirements apply. Students are expected
to have a strong undergraduate mathematics background, but need not
have an undergraduate statistics or mathematics degree. Students may
be admitted with deficiencies, which are to be removed during the first
year of graduate work. A minimum Test of English as a Foreign Language
(TOEFL) score of 590 for the paper-based test or 243 for the computer-
based test is required for students whose native language is not English.
The Graduate Record Examination (GRE) is required. The department
offers Ph.D. admissions for the fall only.

Graduate Teaching Experience
Although teaching is not a general Graduate College requirement,
experience in teaching is considered an important part of the graduate
experience in the Ph.D. program.

Financial Aid
Financial aid is available primarily in the form of teaching assistantships,
research assistantships, and fellowships. For further information write to
the Graduate Admissions Committee, Department of Statistics.

- Master of Science in Statistics (http://catalog.illinois.edu/graduate/
  graduate-majors/statistics/ms)
- Master of Science in Statistics, Analytics Concentration (http://
catalog.illinois.edu/graduate/graduate-majors/statistics/ms-
analytics-concentration)
- Master of Science in Statistics, Applied Statistics Concentration
  (http://catalog.illinois.edu/graduate/graduate-majors/statistics/ms-
  applied-statistics-concentration)

Doctor of Philosophy in Statistics
MS Equivalent Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 424</td>
<td>Analysis of Variance</td>
<td>4</td>
</tr>
<tr>
<td>STAT 425</td>
<td>Applied Regression and Design</td>
<td>4</td>
</tr>
<tr>
<td>STAT 426</td>
<td>Sampling and Categorical Data</td>
<td>4</td>
</tr>
<tr>
<td>STAT 510</td>
<td>Mathematical Statistics I</td>
<td>4</td>
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</table>

Theory Core Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>STAT 511</td>
<td>Mathematical Statistics II</td>
<td>4</td>
</tr>
<tr>
<td>STAT 553</td>
<td>Probability and Measure I</td>
<td>4</td>
</tr>
<tr>
<td>STAT 575</td>
<td>Large Sample Theory</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one Practicum Course:
- STAT 427 Statistical Consulting
- STAT 593 STAT Internship
- STAT 595 Preparing Future Faculty

Select one Computational Theory and Methods Course:
- STAT 428 Statistical Computing
- STAT 525 Computational Statistics
- STAT 530 Bioinformatics
- STAT 542 Statistical Learning

Select one of the Stochastic Processes and Time Series Courses:
- STAT 429 Time Series Analysis
- STAT 433 (Stochastic Processes)
- STAT 554 Probability and Measure II
- STAT 555 Applied Stochastic Processes

Select at least 3 elective courses from a list within the
department. At least two courses must be at the 500-level.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 590</td>
<td>Individual Study and Research</td>
<td>0-32</td>
</tr>
<tr>
<td>STAT 599</td>
<td>Thesis Research (0 min applied toward degree)</td>
<td>0</td>
</tr>
</tbody>
</table>

Total Hours 64

Other Requirements
Other requirements may overlap

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
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<tbody>
<tr>
<td>Masters Degree Required for Admission to PhD?</td>
<td>No, but Masters level requirements must be met (32 additional hours min)</td>
</tr>
<tr>
<td>Qualifying Exam Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Preliminary Exam Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Final Exam/Dissertation Defense Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Dissertation Deposit Required</td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum GPA:</td>
<td>2.75</td>
</tr>
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</table>

For additional details and requirements refer to the
department's Graduate Programs (http://www.stat.illinois.edu/
students/graduates.shtml) and the Graduate College Handbook (http://
www.grad.illinois.edu/gradhandbook).

The Graduate Minor in Statistics is designed for doctoral students
pursuing degrees in other fields who wish to enhance their statistical
knowledge and credentials. Students within the major cannot minor
in the same program. The Minor is taken in conjunction with, and is
intended to complement the student’s work in their primary disciplines.
Admission to the minor requires an application to the Department and
admission to a PhD program (MS track to PhD cannot apply until they
are in the PhD program) in another field at the University of Illinois.
Applications for the Minor are submitted upon completion of the required

Information listed in this catalog is current as of 07/2017
Approval is contingent on having grade point average of 3.0 or better in the Minor. A total of three courses, constituting 12 graduate credit hours, are required for the minor in Statistics degree. At least 8 credit hours must be taken at the 500 level. No course substitutions allowed.

<table>
<thead>
<tr>
<th>Course Level</th>
<th>Courses Required</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>400-level</td>
<td>Statistics</td>
<td>4</td>
</tr>
<tr>
<td>500-level</td>
<td>Statistics</td>
<td>8</td>
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<tr>
<td>Total Hours</td>
<td></td>
<td>12</td>
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Students wishing information beyond that provided here should contact the Director of MS Studies in Statistics.