### STATISTICS, MS

*for the degree of Master of Science in Statistics*

#### Graduate Degree Programs in Statistics

- Statistics, MS (p. 1)
  - concentrations:
    - Analytics ([link](http://catalog.illinois.edu/graduate/las/statistics-ms/analytics/))
    - Applied ([link](http://catalog.illinois.edu/graduate/las/statistics-ms/applied/))
- Statistics, PhD ([link](http://catalog.illinois.edu/graduate/las/statistics-phd/))
  - optional concentrations for the PhD:
    - Computational Science & Engineering ([link](http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/))
    - Data Science & Engineering ([link](http://catalog.illinois.edu/graduate/engineering/concentration/data-science-engineering/))
- Graduate Minor in Statistics ([link](http://catalog.illinois.edu/graduate/las/minors/statistics/))

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

#### Code Title Hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 510</td>
<td>Mathematical Statistics</td>
<td>4</td>
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</tbody>
</table>

Select one of the following:

- STAT 425 Statistical Modeling I 4
- or STAT 527 Advanced Regression Analysis 4

Select one of the following:

- STAT 424 Analysis of Variance 4
- STAT 426 Statistical Modeling II 4
- STAT 429 Time Series Analysis 4
- STAT 431 Applied Bayesian Analysis 4
- STAT 433 Stochastic Processes 4
- STAT 528 Advanced Regression Analysis II 4
- STAT 533 Advanced Stochastic Processes 4
- STAT 556 Advanced Time Series Analysis 4

Five elective courses from Departmental List (See Course List Tab) 20

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>STAT 427</td>
<td>Statistical Consulting (or experience in applied statistics)</td>
<td>0-4</td>
</tr>
<tr>
<td>or STAT 593</td>
<td>STAT Internship</td>
<td></td>
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<tr>
<td>or STAT 443</td>
<td>Professional Statistics</td>
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</table>

STAT 410/MATH 464 Statistics and Probability II (or equivalent proficiency - may be waived with approval) 0-4

**Total hours** 32-36

#### Other Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Other Requirements may overlap</td>
<td></td>
</tr>
<tr>
<td>A concentration is not required.</td>
<td></td>
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<tr>
<td>Minimum 500-level Hours Required Overall:</td>
<td>12</td>
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<tr>
<td>Minimum GPA:</td>
<td>2.75</td>
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</table>

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<table>
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<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>Statistics Departmental Course List</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT 424</td>
<td>Analysis of Variance</td>
<td></td>
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</tbody>
</table>
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Statistics students in the MS program will

1. Acquire a solid foundation in mathematical statistics and learn how it applies it to data analysis;
2. Develop strong communication abilities in writing and orally that will allow them to work effectively in diverse teams;
3. Become skillful in statistical computing, data management, and statistical software;
4. Be knowledgeable of the most modern techniques in statistical methodology and data science, especially data analysis techniques associated with statistical learning and machine learning;
5. Develop an understanding and gain experience in applying methodology learned in the classroom to real problems in science and industry.

for the degree of Master of Science in Statistics

Information listed in this catalog is current as of 12/2022
Statistics Department
Department Chair: Bo Li (https://stat.illinois.edu/directory/profile/libo/)
Associate Department Chair: Jeff Douglas (https://stat.illinois.edu/directory/profile/jeffdoug/)
PhD Program Director: Xiaofeng Shao (https://stat.illinois.edu/directory/profile/xshao/)
Department Contact: Aaron Thompson
Graduate Contact: Joseph Zarnsy (stat-grad@illinois.edu)
Statistics Department website (http://www.stat.illinois.edu/)
Computing Applications Building, 605 E Springfield Ave, Champaign, IL 61820
(217) 333-2167
Statistics email (stat-grad@illinois.edu)

College of Liberal Arts & Sciences
College of Liberal Arts & Sciences website (https://las.illinois.edu/)

Admissions
Statistics Department Admissions Info & Requirements (https://stat.illinois.edu/admissions/prospective-graduate-students/)
Graduate College Admissions & Requirements (https://grad.illinois.edu/admissions/apply/)

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