M.S. in Applied Statistics

Degree Requirements

The Master of Science in Applied Statistics requires 30 credits: 21 credits in core courses and 9 credits of elective courses. Students must successfully complete at least 24 of these credits at the 600-level or higher, and no more than six credits at the 500-level will be counted towards the degree. A master's thesis or a master's project is optional.

Seminar: In addition to the minimum 30 degree credits required, all students who receive departmental or research-based awards must enroll every semester in MATH 791 Graduate Seminar.

M.S. in Applied Statistics (courses only)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 611</td>
<td>Numerical Methods for Computation</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 630</td>
<td>Linear Algebra and Applications</td>
<td></td>
</tr>
<tr>
<td>MATH 644</td>
<td>Regression Analysis Methods</td>
<td>3</td>
</tr>
<tr>
<td>MATH 661</td>
<td>Applied Statistics ¹</td>
<td>3</td>
</tr>
<tr>
<td>MATH 662</td>
<td>Probability Distributions</td>
<td>3</td>
</tr>
<tr>
<td>MATH 664</td>
<td>Methods for Statistical Consulting</td>
<td>3</td>
</tr>
<tr>
<td>MATH 665</td>
<td>Statistical Inference</td>
<td>3</td>
</tr>
<tr>
<td>MATH 699</td>
<td>Design and Analysis of Experiments</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives
Select three courses with approval of graduate advisor

Total Credits                                                                 30

¹ MATH 661 Applied Statistics and MATH 663 Introduction to Biostatistics cannot both be used toward degree credits at NJIT. The requirements of MATH 661 Applied Statistics may, in individual cases, be substituted by MATH 663 Introduction to Biostatistics, at the discretion of the Graduate Advisor.

M.S. in Applied Statistics (M.S. project)

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<td>MATH 699</td>
<td>Design and Analysis of Experiments</td>
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</tr>
<tr>
<td>MATH 700B</td>
<td>Master's Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives
Select two courses with approval of graduate advisor

Total Credits                                                                 30

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# M.S. in Applied Statistics (M.S. thesis)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Core Courses</strong></td>
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<tr>
<td>MATH 611</td>
<td>Numerical Methods for Computation</td>
<td>3</td>
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<td>or MATH 630</td>
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<td>Design and Analysis of Experiments</td>
<td>3</td>
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<td><strong>Master’s Thesis</strong></td>
<td></td>
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<tr>
<td>MATH 701B &amp; 701B</td>
<td>Master’s Thesis and Master’s Thesis</td>
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<td>or MATH 701C</td>
<td>Master’s Thesis</td>
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<tr>
<td><strong>Electives</strong></td>
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<td>3</td>
</tr>
<tr>
<td>Select one course with approval of graduate advisor</td>
<td></td>
<td></td>
</tr>
<tr>
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Electives are chosen in consultation with a departmental graduate advisor and consist of advanced courses in mathematics and statistics and advanced courses from engineering, computer science, and biology that have a significant statistics content. Students are encouraged to choose courses in application areas. Courses offered by appropriate departments at NJIT, RBHS, and Rutgers University-Newark can be used as electives within the limits of the NJIT transfer policy. All elective courses must be approved by the graduate advisor.