ACTUARIAL SCIENCE, MS

for the Master of Science in Actuarial Science

department chair: Vera Hur
director of graduate studies: Yuliy Baryshnikov
overview of admissions & requirements:
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (https://grad.illinois.edu/admissions/apply/
department website: http://www.math.illinois.edu
program website: https://math.illinois.edu/admissions/graduate-program-mathematics-admissions#MS-ActSci (https://math.illinois.edu/admissions/graduate-program-mathematics-admissions/#MS-ActSci)
department faculty: https://math.illinois.edu/research/faculty-research/actuarial-science (https://math.illinois.edu/research/faculty-research/actuarial-science/)
college website: https://las.illinois.edu/
department office: 273 Altgeld Hall, 1409 West Green Street, Urbana, IL 61801
phone: (217) 333-5749
e-mail: math-grad@illinois.edu

The Master of Science in Actuarial Science prepares students with quantitative undergraduate degrees for actuarial professional careers. The program offers a unique blend of coursework for both professional training and advanced techniques and opportunities for experiential learning.

Graduate Degree Programs in Mathematics

Actuarial Science, MS (p. 1)
Applied Mathematics, MS (http://catalog.illinois.edu/graduate/las/applied-mathematics-ms/)
Mathematics, MS (http://catalog.illinois.edu/graduate/las/mathematics-ms/)
Predictive Analytics and Risk Management, MS (http://catalog.illinois.edu/graduate/las/predictive-analytics-risk-management-ms/)
Enterprise Risk Management (http://catalog.illinois.edu/graduate/las/predictive-analytics-risk-management-ms/enterprise-risk-management/) | Financial and Insurance Analytics (http://catalog.illinois.edu/graduate/las/predictive-analytics-risk-management-ms/financial-insurance-analytics/)
Mathematics, PhD (http://catalog.illinois.edu/graduate/las/mathematics-phd/)
optional concentrations:
Actuarial Science & Risk Analytics (http://catalog.illinois.edu/graduate/las/mathematics-phd/actuarial-science-risk-analytics/)
Computational Science and Engineering (http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/)
Teaching of Mathematics, MS (http://catalog.illinois.edu/graduate/las/teaching-mathematics-ms/)

for the Master of Science in Actuarial Science

For additional details and requirements refer to the department’s Guide to Graduate Studies (https://files.webservices.illinois.edu/7917/GraduateGuide18-19.pdf) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

Non-Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two courses chosen from the following:</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>ASRM 510</td>
<td>Financial Mathematics</td>
<td></td>
</tr>
<tr>
<td>ASRM 561</td>
<td>Loss Data Analytics &amp; Credibility</td>
<td></td>
</tr>
<tr>
<td>ASRM 569</td>
<td>Extreme Value Theory and Catastrophe Modeling</td>
<td></td>
</tr>
<tr>
<td>ASRM 575</td>
<td>Life Insurance and Pension Mathematics</td>
<td></td>
</tr>
<tr>
<td>MATH 563</td>
<td>Risk Modeling and Analysis</td>
<td></td>
</tr>
<tr>
<td>Electives chosen in consultation with the faculty advisors. These electives may include additional courses from the list above.</td>
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<tr>
<td><strong>Total Hours</strong></td>
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Information listed in this catalog is current as of 04/2022
### Other Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>MATH 405, MATH 406, MATH 415, MATH 444, and MATH 499 cannot be counted toward this graduate degree.</td>
<td></td>
</tr>
<tr>
<td>Minimum hours required within ASRM:</td>
<td>20</td>
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<tr>
<td>Minimum GPA:</td>
<td>3.0</td>
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<tr>
<td>Minimum 500-level hours required overall:</td>
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### Thesis Option

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<tr>
<td>Electives chosen in consultation with the faculty advisors. These electives may include additional courses from the list above.</td>
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<td></td>
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<tr>
<td>Thesis Research (min/max applied toward degree)</td>
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<td></td>
</tr>
<tr>
<td>Total Hours</td>
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</tr>
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