The MS Mathematics degree consists of three parts: Core courses (11 units), Electives (15 units), and Master’s Thesis (6 units) for a total of 32 minimum units required.

Students must obtain a grade of B- or better in order for courses to be applied to the MS in Mathematics degree. Students must receive a grade of B or better in at least 2 units of MATH 597 or MATH 598 to satisfy the Graduate Writing Assessment requirement (GWAR) necessary for graduation.

<table>
<thead>
<tr>
<th>MS Mathematics Curriculum</th>
<th>Units</th>
<th>Instit.</th>
<th>Course</th>
<th>Units</th>
<th>Grade</th>
<th>Term</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Core Requirements (11 units)</td>
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<td>MATH 511 Functional Analysis</td>
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<td>MATH 512 Probabilistic Methods &amp; Measure Theory</td>
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<td>MATH 599 Graduate Seminar</td>
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<td>Electives (15 units)</td>
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<td>Choose at least two electives from the following list:</td>
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<tr>
<td>MATH 570 Combinatorics</td>
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<td>MATH 582 Number Theory and Cryptography</td>
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<td>MATH 584 Algebraic Geometry and Coding Theory</td>
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<td>MATH 587 Markov Chains and Markov Processes</td>
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<td>MATH 590 Graduate Topics in Mathematics</td>
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</table>
Choose at least three electives from the following list:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH 555</td>
<td>Actuarial Sciences</td>
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<tr>
<td>MATH 565</td>
<td>Research in Mathematics Education</td>
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<tr>
<td>PHYS/COMP/MATH 510</td>
<td>Advanced Image Analysis Techniques</td>
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<td>PHYS/COMP/MATH 546</td>
<td>Pattern Recognition</td>
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<tr>
<td>COMP/MATH 554</td>
<td>Algorithms</td>
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<td>COMP 569</td>
<td>Artificial Intelligence</td>
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<td>COMP 571</td>
<td>Biologically Inspired Computing</td>
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<td>COMP 572</td>
<td>Neural Networks</td>
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<tr>
<td>COMP 575</td>
<td>Multi-Agent Systems</td>
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<tr>
<td>COMP 578</td>
<td>Data Mining</td>
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<tr>
<td>MATH 594</td>
<td>Independent Study</td>
<td>1-3</td>
</tr>
</tbody>
</table>

MATH 594 – Independent Study and other graduate courses from mathematics or the mathematical sciences may be included with the graduate advisors approval.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH 597/598</td>
<td>Master’s Thesis/Masters Project</td>
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Advising Notes: