

## M.S. – Mathematical Sciences: Thesis and Non-thesis Options

- The current MS – Mathematical Sciences program is a 36 hour non-thesis program. This program is essentially unchanged and serves as the Non-Thesis Option of this program.
- The new Thesis Option in this program accommodates a 6 hour thesis requirement by reducing the core requirements from 18 hours to 12 hours.
- In both the Thesis and Non-Thesis Options, four new courses are added to the list of Designated Electives.

	<b>Non-Thesis Option</b>	<b>Thesis Option (New)</b>
<b>Core</b>	MATH 6331 Algebra I MATH 6332 Algebra II MATH 6352 Analysis I MATH 6353 Analysis II MATH 6365 Probability & Statistics MATH 6387 Modeling	MATH 6331 Algebra I MATH 6352 Analysis I MATH 6331 Algebra II OR MATH 6353 Analysis II MATH 6365 Probability & Statistics OR MATH 6387 Modeling
<b>Designated Electives</b>	Select four courses from the following:  MATH 6360 Ordinary Differential Equations MATH 6361 Partial Differential Equations MATH 6362 Fourier Analysis MATH 6364 Statistical Methods MATH 6370 Topology MATH 6388 Discrete Mathematics <i>MATH 63xx Numerical Analysis (new course)</i> <i>MATH 63xx Numerical Methods for PDE's (new course)</i> <i>MATH 63xx Cryptology &amp; Codes (new course)</i> <i>MATH 63xx Applied Analysis (new course)</i> <i>MATH 63xx Linear Algebra (new course)</i>	Select four courses from the following:  MATH 6360 Ordinary Differential Equations MATH 6361 Partial Differential Equations MATH 6362 Fourier Analysis MATH 6364 Statistical Methods MATH 6370 Topology MATH 6388 Discrete Mathematics <i>MATH 63xx Numerical Analysis (new course)</i> <i>MATH 63xx Numerical Methods for PDE's (new course)</i> <i>MATH 63xx Cryptology &amp; Codes (new course)</i> <i>MATH 63xx Applied Analysis (new course)</i> <i>MATH 63xx Linear Algebra (new course)</i> MATH 6332 Algebra II** MATH 6353 Analysis II** MATH 6365 Probability & Statistics** MATH 6387 Modeling**  <i>** If not used to meet the core requirement.</i>
<b>Free Electives</b>	Select an additional 6 hours of approved electives.	Select an additional 6 hours of approved electives.
<b>Thesis</b>		<i>MATH 7300 Thesis I (new course)</i> <i>MATH 7301 Thesis II (new course)</i>