MATHEMATICS MAJOR: CONCENTRATION IN SECONDARY EDUCATION

Admission Requirements for the Mathematics Major
Rigorous high school coursework and strong SAT scores with above average grades in mathematics and computer science courses.

Requirements for a Major in Mathematics
Students must complete a core of six mathematics courses and one computer science class and in addition select one of three concentrations.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-200</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MA-201</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MA-240</td>
<td>Theory of Proof</td>
<td>4</td>
</tr>
<tr>
<td>MA-260</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MA-310</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MA-470</td>
<td>Capstone Experience</td>
<td>3</td>
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</tbody>
</table>

Ancillary Course
CS-135 Programming for Non-CS Majors 3

Total Credits 25

MA-200, MA-201 and MA-240 must be completed with grades of at least C- by the end of the sophomore year. A student may only retake any of these courses at most once to increase a grade below C-; and may retake at most two of these courses to increase a grade below C-.

Requirements for the Concentration in Secondary Education

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MA-302</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MA-309</td>
<td>Topics in Mathematics for Middle and Secondary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MA-340</td>
<td>Modern Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MA-405</td>
<td>Abstract Algebra</td>
<td>3</td>
</tr>
<tr>
<td>or MA-410</td>
<td>Real Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MA-360</td>
<td>Number Theory</td>
<td>3</td>
</tr>
<tr>
<td>MA-303</td>
<td>Mathematical Modeling</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits 18

It is recommended that students planning to take the Massachusetts Test for Educator Licensure (MTEL) for high school certification also complete a physics course. A secondary education minor, 4+ in Secondary Education or Post Baccalaureate initial license program through the education department are also required for licensure as a math teacher.

It is recommended that students planning to take the Massachusetts Test for Educator Licensure (MTEL) for high school certification also complete a physics course.

Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.
<table>
<thead>
<tr>
<th>Semester Eight</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>SELECT</td>
<td>General Elective</td>
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</tr>
<tr>
<td>Credits</td>
<td>12</td>
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</tbody>
</table>

Total Credits 122

1 Only one of MA-405 or MA-410 is required.

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Students should consult with their advisors about minoring in secondary education.