**MATHEMATICS FOR SECONDARY TEACHERS - M.A.**

*College of Arts and Sciences*
*Department of Mathematical Sciences*
*233 Mathematics and Computer Science Building*
*Kent Campus*
*330-672-2430*
*math@math.kent.edu*
*www.kent.edu/math*

**Description**
The Master of Arts degree in Mathematics for Secondary Teachers is a three-year program offered in the evenings and summer. Designed collaboratively by faculty in mathematical sciences and teacher education, the program is for in-service teachers and features both mathematics and education classes. The program does not lead to Ohio teacher licensure.

**Fully Offered At:**
- Kent Campus

**Admission Requirements**
- Bachelor's degree from an accredited college or university for unconditional admission
- Minimum 3.000 undergraduate GPA on a 4.000 point scale for unconditional admission
- Official transcript(s)
- Goal statement
- Résumé or vita
- Three letters of recommendation
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning one of the following:
  - Minimum 525 TOEFL PBT score (paper-based version)
  - Minimum 71 TOEFL IBT score (Internet-based version)
  - Minimum 74 MELAB score
  - Minimum 6.0 IELTS score
  - Minimum 50 PTE score

For more information about graduate admissions, please visit the Graduate Studies admission website. For more information on international admission, visit the Office of Global Education’s admission website.

**Program Learning Outcomes**
Graduates of this program will be able to:

1. Reason in mathematical arguments, including using precise definitions, articulating assumptions and reasoning logically to conclusions.
2. Engage effectively in problem solving, including exploring examples, devising and testing conjectures and assessing the correctness of solutions.
3. Approach mathematical problems creatively, including trying multiple approaches and modifying problems when necessary to make them more tractable.
4. Communicate mathematics clearly both orally and in writing.
5. Teach high school-level mathematics.
6. Understand and appreciate connections among different subdisciplines of mathematics.
7. Be aware of and understand a broad range of mathematical subdisciplines.
8. Obtain a broader and deeper understanding of algebra, geometry and analysis and their interpretation in the K-12 curriculum.

**Program Requirements**

**Major Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI 67224</td>
<td>TEACHING MATHEMATICS USING COMPUTERS AND CALCULATORS</td>
<td>3</td>
</tr>
<tr>
<td>CI 67225</td>
<td>RESEARCH IN MATHEMATICS EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>CI 67791</td>
<td>SEMINAR IN MATHEMATICS EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>MATH 64091</td>
<td>SEMINAR IN MATHEMATICS EDUCATION (repeatable)</td>
<td>6</td>
</tr>
</tbody>
</table>

**Mathematics Electives (MATH 60000 level)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 51021</td>
<td>THEORY OF MATRICES</td>
</tr>
<tr>
<td>MATH 52021</td>
<td>GRAPH THEORY AND COMBINATORICS</td>
</tr>
<tr>
<td>MATH 52041</td>
<td>ADVANCED CALCULUS</td>
</tr>
<tr>
<td>MATH 52201</td>
<td>NUMERICAL COMPUTING I</td>
</tr>
<tr>
<td>MATH 55021</td>
<td>EUCLIDEAN GEOMETRY</td>
</tr>
<tr>
<td>MATH 55022</td>
<td>LINEAR GEOMETRY</td>
</tr>
<tr>
<td>MATH 57011</td>
<td>THEORY OF NUMBERS</td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 38

**Graduation Requirements**

- Minimum 32 credit hours of graduate credit with minimum 16 credit hours at the 60000 level and 22 credit hours in mathematics
- Two to three courses in each of the areas of modern algebra, geometry and analysis
- Courses in applied mathematics and current trends in teaching
- Successful passage of a final examination in general mathematics