**TEACHER EDUCATION MINOR IN MATHEMATICS, GRADES 9-12**

For students in teacher education curricula other than mathematics who wish to be qualified to teach mathematics at the high school level.

E-mail: mathadvising@illinois.edu

Web address for department: [www.math.illinois.edu](http://www.math.illinois.edu)

To obtain an endorsement to teach mathematics in grades 9-12, students must also pass the Illinois Certification Testing System Test in Mathematics. Information and practice exams are available at [www.icts.nesinc.com](http://www.icts.nesinc.com).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Calculus</td>
<td>5</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Calculus II (or equivalent)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 241</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>CI 434</td>
<td>Teaching Secondary Math</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A course covering topics in non-Euclidean geometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 402</td>
<td>Non Euclidean Geometry</td>
<td></td>
</tr>
<tr>
<td>or MATH 403</td>
<td>Euclidean Geometry</td>
<td></td>
</tr>
</tbody>
</table>

At least 7 hours of work from at least two of the following areas:

- **Computer Science (one course only)**
  - CS 101 Intro Computing: Engrg & Sci
  - CS 105 Intro Computing: Non-Tech

- **Linear Algebra**
  - MATH 125 Elementary Linear Algebra
  - MATH 225 Introductory Matrix Theory
  - MATH 415 Applied Linear Algebra
  - MATH 416 Abstract Linear Algebra

- **Modern Algebra**
  - MATH 413 Intro to Combinatorics
  - MATH 417 Intro to Abstract Algebra
  - MATH 453 Elementary Theory of Numbers

- **Applied Mathematics**
  - MATH 347 Fundamental Mathematics
  - or MATH 348 Fundamental Mathematics-ACP
  - MATH 285 Intro Differential Equations
  - MATH 441 Differential Equations
  - MATH 444 Elementary Real Analysis
  - MATH 446 Applied Complex Variables

- **Probability-Statistics**
  - STAT 400/ MATH 400 Statistics and Probability
  - MATH 463

- **History of Calculus**
  - MATH 406 History of Calculus