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

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.

<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>
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<tr>
<td>MATH 241</td>
<td>Calculus III</td>
<td>4</td>
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<tr>
<td>Methods courses in the teaching of mathematics</td>
<td>3</td>
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<tr>
<td>CI 434</td>
<td>Teaching Secondary Mathematics</td>
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<tr>
<td>A course covering topics in non-Euclidean geometry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 402</td>
<td>Non Euclidean Geometry</td>
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<tr>
<td>or MATH 403</td>
<td>Euclidean Geometry</td>
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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 447  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 463  Statistics and Probability I
  - MATH 463

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