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

<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>
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Methods courses in the teaching of mathematics

- CI 434  Teaching Secondary Math

A course covering topics in non-Euclidean geometry

- MATH 402  Non Euclidean Geometry
  - or MATH Euclidean Geometry

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/  Statistics and Probability I
- MATH 463

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

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.