# 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: dirug@math.uiuc.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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</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>CI 434</td>
<td>Teaching Secondary Math</td>
<td>3</td>
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Methods courses in the teaching of mathematics: 3

A course covering topics in non-Euclidean geometry: 3

- MATH 402 Non Euclidean Geometry
- MATH 403 Euclidean Geometry

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

- **Computer Science (one course only)**
  - CS 101 Intro Computing: Engr & 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