# 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)

<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>
</tbody>
</table>

Methods courses in the teaching of mathematics 3

CI 434 Teaching Secondary Math 3

A course covering topics in non-Euclidean geometry 3

MATH 402 Non Euclidean Geometry 3

or MATH Euclidean Geometry 3

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

## 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 463 Statistics and Probability I

## 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 (http://www.icts.nesinc.com).

Information listed in this catalog is current as of 11/2018