# Mathematics

**MATH 415  Applied Linear Algebra**  credit: 3 OR 4 hours.

Introductory course emphasizing techniques of linear algebra with applications to engineering; topics include matrix operations, determinants, linear equations, vector spaces, linear transformations, eigenvalues, and eigenvectors, inner products and norms, orthogonality, equilibrium, and linear dynamical systems. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Credit is not given for both MATH 415 and any of MATH 125, MATH 225, or MATH 410. Prerequisite: MATH 241 or consent of instructor.

This course satisfies the General Education Criteria for a: Quantitative Reasoning II

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
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</thead>
<tbody>
<tr>
<td>37967</td>
<td>Lecture-Discussion</td>
<td>C13</td>
<td>10:00 AM - 10:50 AM</td>
<td>MWF</td>
<td>269 - Everitt Laboratory</td>
<td>Guillou, B</td>
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</tbody>
</table>

Credit Hours: 3 hours
Quant Reasoning II course.
Open to both undergraduate and graduate students.

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<td>C14</td>
<td>10:00 AM - 10:50 AM</td>
<td>MWF</td>
<td>269 - Everitt Laboratory</td>
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<td>MWF</td>
<td>223 - Gregory Hall</td>
<td>Duursma, I</td>
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Credit Hours: 3 hours
Quant Reasoning II course.
Uses Mathematica courseware. See [http://www.math.uiuc.edu/timetable/](http://www.math.uiuc.edu/timetable/) for details. Open to both undergraduate and graduate students.
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<td>Schenck, H</td>
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<td>Lecture-Discussion</td>
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<td>12:30 PM - 01:50 PM</td>
<td>TR</td>
<td>245 - Altgeld Hall</td>
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