# Mathematics

**MATH 461  Probability Theory**  credit: 3 OR 4 hours.

Introduction to mathematical probability; includes the calculus of probability, combinatorial analysis, random variables, expectation, distribution functions, moment-generating functions, and central limit theorem. 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 461 and either MATH 408 or ECE 313. Prerequisite: MATH 241 or equivalent.

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>39132</td>
<td>Lecture-Discussion</td>
<td>B13</td>
<td>09:00 AM - 09:50 AM</td>
<td>MWF</td>
<td>445 - Altgeld Hall</td>
<td>La Nave, G</td>
</tr>
</tbody>
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Credit Hours: 3 hours

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<tbody>
<tr>
<td>33523</td>
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Credit Hours: 4 hours

Instructor Approval Required
Restricted to Graduate - Urbana-Champaign.
Instructor approval forms available in 313 Altgeld Hall beginning on the first day of Fall semester.

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<thead>
<tr>
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<tr>
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<td>MWF</td>
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<td>141 - Altgeld Hall</td>
<td>Zharnitsky, V</td>
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Credit Hours: 3 hours

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<tr>
<td>39134</td>
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<td>Zharnitsky, V</td>
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<tr>
<td>41584</td>
<td>Online</td>
<td>EGR</td>
<td>ARRANGED</td>
<td>-</td>
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Restricted to MS: Civil Engr - Online - UIUC, MCS:Computer Sci Online -UIUC, or MS:Mechanical Engineering -UIUC.
Restricted to online MCS, online MSME, and online MSCEE students. Online & Continuing Education (OCE) restrictions and assessments apply, see http://www.oce.illinois.edu. For more details on this course section, please see http://online.dev.engr.illinois.edu/current-students/course-information/fall-2013-credit-course-offerings. Campus undergraduates are not eligible to register for this section.
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<thead>
<tr>
<th>Course</th>
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<td>Ivanov, S</td>
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OCE Tuition $1017.00 per Bill Hour, and OCE Fees $50.00 per Bill Hour.

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This section incorporates the use of technology through Mathematica assignments. See [http://www.math.uiuc.edu/timetable/](http://www.math.uiuc.edu/timetable/) for details.

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