# 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. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 461 and either MATH 408 or ECE 313. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. 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>
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<tbody>
<tr>
<td>38063</td>
<td>Lecture-Discussion</td>
<td>D13</td>
<td>11:00 AM - 11:50 AM</td>
<td>MWF</td>
<td>156 - Henry Administration Bldg</td>
<td>Wang, J</td>
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<tr>
<td>38056</td>
<td>Lecture-Discussion</td>
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<td>01:00 PM - 01:50 PM</td>
<td>MWF</td>
<td>245 - Altgeld Hall</td>
<td>Wang, J</td>
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<td>38058</td>
<td>Lecture-Discussion</td>
<td>E14</td>
<td>01:00 PM - 01:50 PM</td>
<td>MWF</td>
<td>245 - Altgeld Hall</td>
<td>Wang, J</td>
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<tr>
<td>40671</td>
<td>Online</td>
<td>EGR</td>
<td>ARRANGED -</td>
<td>-</td>
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<td>Carpenter, B</td>
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<td>38050</td>
<td>Lecture-Discussion</td>
<td>X13</td>
<td>12:00 PM - 12:50 PM</td>
<td>MWF</td>
<td>156 - Henry Administration Bldg</td>
<td>Kirkpatrick, K</td>
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</table>

Credit Hours: 3 hours
Open to both undergraduate and graduate students.

Credit Hours: 4 hours
Instructor Approval Required
Not intended for Undergrad - Urbana-Champaign.
Instructor approval forms available in 313 Altgeld Hall starting the first day of the spring semester.

Credit Hours: 3 hours
Open to both undergraduate and graduate students.

Credit Hours: 4 hours
Instructor Approval Required
Not intended for Undergrad - Urbana-Champaign.
Instructor approval forms available in 313 Altgeld Hall starting the first day of the spring semester.

Credit Hours: 3 hours
Restricted to online MCS, online MSME, online MSAE and online MSCE students only. Online non-degree and campus undergraduates are not eligible to register for this section. For more details on this course section, please see [http://engineering.illinois.edu/online/courses/](http://engineering.illinois.edu/online/courses/). Center for Innovation in Teaching & Learning (CITL) restrictions and assessments apply, see [http://online.illinois.edu](http://online.illinois.edu). This section is restricted to Engineering online graduate degree-seeking students only. Non-degree students please register for MATH 461 M16 section.
Open to both undergraduate and graduate students.

| 38052 | Lecture-Discussion | X14 | 12:00 PM - 12:50 PM | MWF | 156 - Henry Administration Bldg | Kirkpatrick, K |

Credit Hours: 4 hours
Instructor Approval Required
Not intended for Undergrad - Urbana-Champaign.
Instructor approval forms available in 313 Altgeld Hall starting the first day of the spring semester.