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>
</tr>
</thead>
<tbody>
<tr>
<td>39267</td>
<td>Online</td>
<td>EGR</td>
<td>ARRANGED</td>
<td>-</td>
<td>-</td>
<td>Carpenter, B</td>
</tr>
</tbody>
</table>

Credit Hours: 3 hours
Restricted to MS: Civil Engr - Online - UIUC, MCS: Computer Sci Online - UIUC, MS: Mechanical Engineering - UIUC, MS: Aerospace Engr-Online-UIUC, or MENG: Mech Engineering Onl-UIUC.
Meets 15-May-17 - 03-Aug-17.
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. This section is restricted to Engineering online graduate degree-seeking students only. Non-degree students please register for MATH 461 M16 section.

| 38314 | Online | ONL | ARRANGED | - | Carpenter, B |

Credit Hours: 3 hours
Meets 12-Jun-17 - 03-Aug-17.
This section has an online format and requires access to Mathematica-based courseware. Students will receive information about how to sign up for an account in Mathable ($99) after enrollment in the course. This course contains multiple paper-based exams that must be taken with an approved proctor. Exams may be taken on campus with NetMath proctoring; for off-campus options see https://netmath.illinois.edu/offcampus. Credit is not given for both MATH 461 and either MATH 408 or ECE 313. Prerequisite: MATH 241 or equivalent. A 16-week self-paced version of this class will also be available as part of the academic year term (not summer term). Registration for the self-paced class is done through https://netmath.illinois.edu/Register (not Self-Service). This course requires multiple paper-based exams that must be taken with an approved proctor. Exams may be taken on campus with NetMath proctoring; for off-campus options see https://netmath.illinois.edu/offcampus. Off-campus proctors must be able to scan completed exams and email them to NetMath for grading, as well as mailing the paper exam back for archival purposes.