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.

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<th>Time</th>
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Credit Hours: 3 hours
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 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. Credit is not given for both MATH 461 and either MATH 408 or ECE 313. 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). Please contact netmath@illinois.edu with any questions

| 39267 | Online | XGR     | ARRANGED -| -    |

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, NDEG:Grad Nondegree-CE-UIUC, or MENG:Mech Engineering Onl-UIUC.
Restricted to online MSAE, MSCE, MCS, MSIE, and MSME degree students. For more details on this course section, please see http://engineering.illinois.edu/online/courses/.