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. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Credit is not given for both MATH 415 and any of MATH 125, MATH 225, MATH 410, or MATH 416. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 241 or consent of instructor.

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**Credit Hours: 3 hours**

In the fall semester, enrollment is restricted to majors requiring this course. For questions contact mathadvising@illinois.edu. Remaining seats may be made available after the first day of class. Major restrictions will be removed during the morning of August 24, 2016.

**40196**

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| 41587 | Online | EGR | ARRANGED | - | Carpenter, B |

Credit Hours: 3 hours
Restricted to MS: Civil Engr - Online - UIUC, MCS:Computer Sci Online -UIUC, MS:Mechanical Engineerng -UIUC, MS: Aerospace Engr-Online-UIUC, MCS: Computer Sci Online-UIUC, or MENG:Mech Engineering Onl-UIUC.
Restricted to online MSAE, online MCS, online MSME, and online MSCEE students. Center for Innovation in Teaching & Learning (CITL) restrictions and assessments apply, see https://online.illinois.edu. For more details on this course section, please see http://engineering.illinois.edu/online/courses/. Online non-degree students are not eligible to register for this section.
OCE Tuition $1034.00 per Bill Hour, and OCE Fees $50.00 per Bill Hour.