COURSE DETAIL

LINEAR ALGEBRA
Country Australia
Host Institution University of Melbourne
Program(s) University of Melbourne
UCEAP Course Level Lower Division
UCEAP Subject Area(s) Mathematics
UCEAP Course Number 55
UCEAP Course Suffix
UCEAP Official Title LINEAR ALGEBRA
UCEAP Transcript Title LINEAR ALGEBRA
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
This course offers a foundation in key areas of modern mathematics needed in science and technology. It develops the concepts of vectors, matrices and the methods of linear algebra. Students develop the ability to use the methods of linear algebra and gain an appreciation of mathematical proof. Little of the material here has been seen at school and the level of understanding required represents an advance on previous studies. Topics include: systems of linear equations, matrices and determinants; vectors in real n-space, cross product, scalar triple product, lines and planes; vector spaces, linear independence, basis, dimension; linear transformations, eigenvalues, eigenvectors; inner products, least squares estimation, symmetric and orthogonal matrices.

Language(s) of Instruction
English

Host Institution Course Number
MAST10007

Host Institution Course Title
LINEAR ALGEBRA

Host Institution Course Details
https://handbook.unimelb.edu.au/view/2015/MAST10007

Host Institution Campus
Parkville

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics and Statistics

Course Last Reviewed
2024-2025

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