

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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