COURSE DETAIL

LINEAR ALGEBRA I
Country Korea, South
Host Institution Yonsei University
Program(s) Yonsei University
UCEAP Course Level Lower Division
UCEAP Subject Area(s) Mathematics
UCEAP Course Number 40
UCEAP Course Suffix
UCEAP Official Title LINEAR ALGEBRA I
UCEAP Transcript Title LINEAR ALGEBRA I
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course opens the door to higher mathematics, science and technology, as well as economics and social science. This course emphasizes skills, theory, and applications. The course presents the core of the linear algebra as an axiomatic development of the most important elements of finite-dimensional linear algebra and progresses into more abstract areas as we add structure to our knowledge: Fields and Vector spaces, Linear Operators, Determinants and eigenvalues, The Jordan canonical form, Orthogonality and its most important application of best approximation, spectral theory of symmetric matrices and Hermitian matrices, The singular value decomposition, Matrix factorizations and numerical linear algebra, Infinite dimensional vector spaces and Analysis in vector spaces. Linear algebra forms the basis for much of modern mathematics-theoretical, applied, and computational.

Language(s) of Instruction
English

Host Institution Course Number
MAT2102

Host Institution Course Title
LINEAR ALGEBRA I

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

Course Last Reviewed
2025-2026

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