COURSE DETAIL

LINEAR ALGEBRA
Country Japan
Host Institution Tohoku University
Program(s) Engineering and Science
UCEAP Course Level Lower Division
UCEAP Subject Area(s) Mathematics
UCEAP Course Number 10
UCEAP Course Suffix
UCEAP Official Title LINEAR ALGEBRA
UCEAP Transcript Title LINEAR ALGEBRA
UCEAP Quarter Units 3.00
UCEAP Semester Units 2.00

Course Description

This course introduces eigenvalues and eigenvectors of matrices, leading to diagonalization of matrices. Furthermore, vector spaces with inner product are treated and applications of linear algebra to various specialized topics are discussed.

Upon completion of the class, students are expected to:

- Compute eigenvalues and eigenvectors of matrices, and diagonalize real symmetric matrices;
- Understand inner products, orthogonality, and to be able to find orthogonal bases; and,
- Learn applications of linear algebra and perform computations to solve explicit problems.

Language(s) of Instruction
English

Host Institution Course Number
N/A

Host Institution Course Title
LINEAR ALGEBRA B

Host Institution Course Details

Host Institution Campus
Tohoku University

Host Institution Faculty

Host Institution Degree

Host Institution Department
Collegewide

Course Last Reviewed

2023-2024

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