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

Host Institution Campus

Tohoku University

Host Institution Faculty

Host Institution Degree

Host Institution Department

Collegewide

Print