COURSE DETAIL

MATRIX THEORY
Country Sweden
Host Institution Lund University
Program(s) Lund University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mathematics
UCEAP Course Number 146
UCEAP Course Suffix
UCEAP Official Title MATRIX THEORY
UCEAP Transcript Title MATRIX THEORY
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
The major aim of the course is to convey knowledge about and familiarity with the use of concepts and methods from matrix theory and linear algebra, which are important in applications within many subjects in technology, science, and economy. In addition, the course should develop the student's ability in general to assimilate and communicate mathematical theory and to solve problems. Furthermore, the course should strengthen the student's theoretical ability in mathematical programming. The course covers: matrices and determinants; linear spaces; Spectral theory; The Jordan normal form; matrix factorizations; matrix polynomials and matrix functions; norms; scalar products; singular values; normal matrices; Quadratic and Hermitian forms; The Least Squares method and pseudo inverses.

Language(s) of Instruction
English

Host Institution Course Number
MATC70

Host Institution Course Title
MATRIX THEORY

Host Institution Course Details

Host Institution Campus
Science

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

Course Last Reviewed

Print