COURSE DETAIL

LINEAR ALGEBRA

Country
Ireland

Host Institution
University of Galway

Program(s)
University of Galway

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Mathematics

UCEAP Course Number
102

UCEAP Course Suffix

UCEAP Official Title
LINEAR ALGEBRA

UCEAP Transcript Title
LINEAR ALGEBRA

UCEAP Quarter Units
4.00

UCEAP Semester Units
2.70

Course Description

This course is an introduction to the theory and application of linear algebra. Students learn to draw diagrams that illustrate the basic operations of vector algebra in two and three dimensions, recognize the equations of lines and planes in two and three dimensions, perform the matrix computations outlined in the following, solve a linear system using Gaussian elimination, compute the inverse of an invertible matrix, find the orthogonal projection of a vector onto a hyperplane, compute the determinant of a square matrix, compute the characteristic equation of a matrix, find the eigenvectors corresponding to a given eigenvalue, and to diagonalize a diagonalizable matrix.

Language(s) of Instruction
English

Host Institution Course Number
MA203

Host Institution Course Title
LINEAR ALGEBRA

Host Institution Campus
NUI Galway

Host Institution Faculty

Host Institution Degree

Host Institution Department
School of Mathematics, Statistics, and Applied Maths

Print