## **COURSE DETAIL**

## LINEAR ALGEBRA I

**Country** Ireland

Host Institution Trinity College Dublin

**Program(s)** Trinity College Dublin

UCEAP Course Level Upper Division

UCEAP Subject Area(s) Mathematics

UCEAP Course Number

**UCEAP Course Suffix** 

UCEAP Official Title LINEAR ALGEBRA I

UCEAP Transcript Title LINEAR ALGEBRA 1

**UCEAP Quarter Units** 4.00

**UCEAP Semester Units** 2.70

## **Course Description**

This course teaches the application of linear algebra. Topics inlcude lines, planes, vectors, dot and cross product; linear systems, Gauss-Jordan elimination, and reduced row echelon form; matrix multiplication, elementary row operations, and inverse matrix; permutations, odd and even, determinants, and transpose matrix; minors, cofactors, adjoint matrix, inverse matrix, and Cramer's rule; vector spaces, linear independence and span, and bases and dimension; linear operators, matrix of a linear operator with respect to a basis; and change of basis, transition matrix, and conjugate matrices.

Language(s) of Instruction English

Host Institution Course Number MAU11101

Host Institution Course Title LINEAR ALGEBRA I

Host Institution Campus Trinity College Dublin

**Host Institution Faculty** 

**Host Institution Degree** 

Host Institution Department Mathematics

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