

## Linear Algebra 1

Course Number	Course	Prerequisite	Credit hours
0301241	Linear Algebra 1	-	3

System of linear equations, homogeneous and non homogeneous systems, Gauss elimination method and Gauss-Jordan method for solving systems of linear equations, matrices: operations on matrices, using elementary matrices to find the inverse of a matrix, determinants, Cramer's rule, vector spaces, subspaces, linear independence and span, basis, rank and nullity of a matrix, Gram-Schmidt method, changing basis, linear transformation, kernel and range, eqigenvalues and eigenvectors, diagonalization.