

SYLLABUS :-

Prerequisite: void

Vector spaces over any arbitrary field, linear combination, linear dependence and independence, basis and dimension, inner-product spaces, linear transformations, matrix representation of linear transformations, linear functional, dual spaces, eigen values and eigen vectors, rank and nullity, inverse and linear transformation, Cayley-Hamilton Theorem, norms of vectors and matrices, transformation of matrices, adjoint of an operator, normal, unitary, hermitian and skew-hermitian operators, quadratic forms.