



ST ALOYSIUS COLLEGE (AUTONOMOUS), MANGALURU - 575003
 Re-accredited by NAAC with 'A++' Grade with GPA 3.87/4 (4th cycle)
 Recognised as Centre for Research Capacity Building under UGC-SERSS Scheme
 Recognised under the DIT - BUILDER Scheme, Government of India
 College with 'STAR STATUS' conferred by DIT, Government of India
 Recognised by UGC as "College with Potential for Excellence"

DEPARTMENT OF POST GRADUATE STUDIES AND RESEARCH IN MATHEMATICS

Offers a certificate course
in

Problem Solving in Linear Algebra

COURSE CONTENT

- Algebra of matrices, rank, and determinant
- solving system of linear equations
- Vector Spaces, Subspaces, span, linear independence, basis, dimension,
- Matrix of change of basis, direct sum of subspaces
- Eigenvalues and eigenvectors, diagonalization
- Cayley-Hamilton theorem
- Matrix representation of linear transformations

Duration: 30 hrs.
Mode: Online

For more details contact:
 anupriyashetty@staloyusius.edu.in
 9611496024

Course Name: Problem Solving in Linear Algebra

Course Duration: 30 Hours

Course Type: CC

Mode: Online

Course Coordinator and instructor:(Only one name)

Ms Anupriya Shetty

Assistant Professor

Department of Mathematics

St Aloysius College (autonomous), Mangaluru

M. No: 9611496024, Email id: anupriyashetty@staloyusius.edu.in

MODULE 1: Matrices and Vector spaces (15 HOURS)

Algebra of matrices, rank, and determinant, solving system of linear equations, Vector Spaces, Subspaces,

span, linear independence, basis, dimension, Matrix of change of basis, direct sum of subspaces.

MODULE II: Linear Transformations:(15 HOURS)

Eigenvalues and eigenvectors, diagonalization, Cayley-Hamilton theorem, Matrix representation of linear transformations

Mode of Evaluation: Test – 02 & Assignment – 02 (Each Module)