The JGI Group

Jain Institute of Technology
(A Unit of Jain Group of Institutions, Bangalore)
Approved by AICTE, New Delhi and State Govt. DTE
Affiliated to VTU Belgaum.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Name	Calculus and Linear Algebra	Semester	1
Course code	18MAT11	Batch	2018 - 2022

Course Outcomes

C101.1	Apply the knowledge of calculus to solve problems related to polar curves and its applications in determining the bentness of a curve.
C101.2	Learn the notion of partial differentiation to calculate rates of change of multivariate functions and solve problems related to composite functions and jacobians.
C101.3	Apply the concept of change of order of integration and variables to evaluate multiple integrals and their usage in computing the area and volumes.
C101.4	Solve first order linear /nonlinear differential equation analytically using standard methods.
C101.5	Make use of matrix theory for solving system of linear equations and compute eigenvalues and eigenvectors required for matrix diagonalization process.

The JGI Group

Jain Institute of Technology
(A Unit of Jain Group of Institutions, Bangalore)
Approved by AICTE, New Delhi and State Govt. DTE
Affiliated to VTU Belgaum.

Course Name	Advance Calculus and Numerical Methods	Semester	1
Course code	18MAT21	Batch	2018 - 2022

Course Outcomes

C115.1	Illustrate the applications of multivariate calculus to understand the solenoidal and irrotational vectors and also exhibit the inter dependence of line, surface and volume integrals.
C115.2	Demonstrate various physical models through higher order differential equations and solve such linear ordinary differential equations.
C115.3	Construct a variety of partial differential equations and solution by exact methods/method of separation of variables.
C115.4	Explain the applications of infinite series and obtain series solution of ordinary differential equations.
C115.5	Apply the knowledge of numerical methods in the modelling of various physical and engineering phenomena.