

SYLLABUS :-

Prerequisite - none Introduction to numerical methods. Linear algebraic equations. Eigen values and eigenvectors of matrices. Nonlinear algebraic equations. Function evaluation and regression techniques. Numerical methods of solving ordinary differential equations - initial and boundary value problems. Numerical solutions of partial differential equations. Basic modeling principles and development of models in chemical engineering. Simulation techniques. Dynamic and steady state simulators. Text Book: 1. Numerical methods for engineers by S. C. Chapra