Course Number and Name

BMA402 - NUMERICAL METHODS

Course Objectives

- To train the students to Predict the system dynamic behavior through solution of ODEs modeling the system
- To solve PDE models representing spatial and temporal variations in physical systems through numerical methods.

Prerequisites	Co-requisites
BMA101-Mathematics – I BMA201- Mathematics II BMA301- Mathematics III	Nil

Course Outcomes (COs)

CO 1 : Solve a set of algebraic equations representing steady state models formed in engineering problems.

CO2 : Fit smooth curves for the discrete data connected to each other or to use interpolation methods over these data tables.

CO3 :Find the trend information from discrete data set through numerical differentiation and Summary information through numerical integration.

CO4 : Predict the system dynamic behavior through solution of ODEs modeling the system.

CO5 : Solve PDE models representing spatial and temporal variations in physical systems through numerical methods.

CO6 : To train the students with Mathematical techniques to solve problems in Engineering with numerical data.

Student Outcomes (SOs) from Criterion 3 covered by this Course

COs/SOs	a	b	c	d	e	f	g	h	i	j	k
CO1	H	H				M			L		
CO2	H	H	M	M	H				M	H	
CO3	H					H					
CO4	H		M		H						
CO5	H	M							M		
CO6	H	H	M		M	H			L	H	