Techno India NJR Institute of Technology

Academic Administration of Techno NJR Institute

Syllabus Deployment

Name of Faculty : Mr. Abhishek Sharma	Subject Code: 3ME4-24
Subject : MATLAB	
Department : Mechanical Engineering	Sem: III
Total No. of Lectures Planned: 10	

COURSE OUTCOMES:

At the end of this course students will be able to:

CO1: Use MATLAB effectively to analyze and visualize data.

CO2: Apply numeric techniques and computer simulations to solve engineering-related problems.

CO3: Apply a top-down, modular, and systematic approach to design, write, test, and debug sequential MATLAB programs to achieve computational objectives.

CO4: Design and document computer programs and analyses in a careful and complete manner so as to effectively communicate results, to facilitate evaluation.

CO5: Create and control simple plot and user-interface graphics objects in MATLAB.

Lecture No.	Practical No.	Topic
1	**1**	Basics of MATLAB computer programming
2	**2**	Use of formulae and inbuilt functions
3	3	MATLAB scripts and functions (m-files)
4	4	Loops and nested loops
5	5	Array, vector and matrices
6	6	Plotting functions and vector plots
7	7	Solving differential equations using MATLAB
8	8	Reading and writing data, file handling

| 9 | 9 | Using MATLAB toolboxes |
| 10 | 10 | MATLAB graphic functions |

TEXT/REFERENCE BOOKS

1. ????
2. ????