

WORKSHOP PROPOSAL

"MATLAB"

Submitted by: -

E2MATRIX

(An ISO 9001:2008 Certified Company)

The Value of Trust



"Join hands for long relations because trust matter"

www.e2matrix.com

1



1	1 DAY WORKSHOP	Page No: 4
2	2 DAYS WORKSHOP	Page No: 5
3	3 DAYS WORKSHOP	Page No: 6



MATLAB is a software package for computation in engineering, science, and applied mathematics.

It offers a powerful programming language, excellent graphics, and a wide range of expert

knowledge. MATLAB is published by and a trademark of The Math Works, Inc. The focus in MATLAB is on computation, not mathematics: Symbolic expressions and manipulations are not possible (except optional through the Symbolic Toolbox, a clever interface to maple). All results are not only numerical but



inexact, thanks to the rounding errors inherent in computer arithmetic. The limitation to numerical computation can be seen as a drawback, but it's a source of strength too: MATLAB is much preferred to Maple, Mathematical, and the like when it comes to numeric. On the other hand, compared to other numerically oriented languages like C++ and FORTRAN, MATLAB is much easier to use and comes with a huge standard library.



The main purpose of this "Hands-on Training on Matlab" is to create awareness and enrich knowledge for research scholars, faculty and students in the area of Matlab applications.

1-DAY WORKSHOP

Variable, Script and Operations:

This Module describe the -

- 1. Basics of MATLAB programming
- 1. About its variables
- 2. Detail of each window
- 3. Operators
- 4. Plotting of Equations.
- 5. Overview of Visualization and Programming
- 6. Solving Equation and Curve Fitting
- 7. Advanced Method
- 8. Simulink, GUI and basics of other toolboxes
- 9. Applications of MATLAB

TIME DURATION: 4 hours

COST: 200/- PER STUDENT



2 -DAYS WORKSHOP

MODULE 1: VARIABLE, SCRIPT AND OPERATIONS:

This Module describe the basics of MATLAB programming, about its variables, Detail of each window used, operators used and plotting of Equations.

MODULE 2: VISUALIZATION AND PROGRAMMING:

This Module describe the introduction to functions, looping (if-else) and while, advanced 2D plot and 3D plots, Images and Surface plots, intelligent programming (use of Vector).

MODULE 3: SOLVING EQUATION AND CURVE FITTING:

This Module describe that how to Solve Linear Equations, Polynomial equation and their plotting, find differentiation and integration and Solve Differential Equations

TIME DURATION: 4 hours/day

COST: 300/- PER STUDENT



3-DAYS WORKSHOP

MODULE 1: VARIABLE, SCRIPT AND OPERATIONS:

This Module describe the basics of MATLAB programming, about its variables, Detail of each window used, operators used and plotting of Equations.

MODULE 2: VISUALIZATION AND PROGRAMMING:

This Module describe the introduction to functions, looping (if-else) and while, advanced 2D plot and 3D plots, Images and Surface plots, intelligent programming (use of Vector).

MODULE 3: SOLVING EQUATION AND CURVE FITTING:

This Module describe that how to Solve Linear Equations, Polynomial equation and their plotting, find differentiation and integration and Solve Differential Equations.

MODULE 4: ADVANCED METHOD:

This Module describe that how to do hist plotting, Introduction to Advanced data structures, Image processing basics, speech processing basics, Animations, importance of debugging.

MODULE 5: SIMULINK AND GUI:

This Module describe that how to do Model Based Designing, design filters using bock diagram, Importance of Simulink, over programming, interfacing of Matlab and Simulink, make Graphical user interface environment using programming or GUIDE tool.

TIME DURATION: 4 hours/day

COST: 500/- PER STUDENT