



**Rlabz Edutech<sup>®</sup>**  
filliping the education

# Rlabz Edutech

Training | Workshops | Seminar | Consultancy

Presents

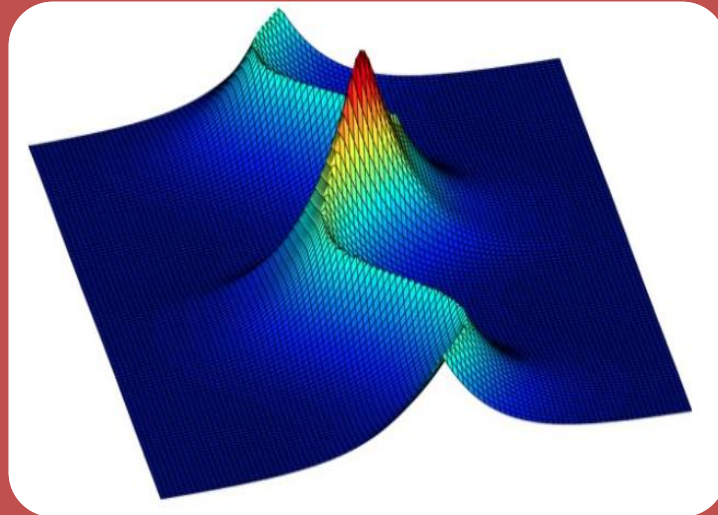


**MATLAB**

# MATLAB

Interactive

Application  
Based



Useful

Fun

Low cost

Online support

User Friendly

Accelerate Learning

## Itinerary of the workshop with details of the Topics to be covered



### MATLAB (Matrix Laboratory)

#### DAY 1






##### Session 1

##### Introduction to MATLAB




-  About MATLAB
-  Installing on windows
-  Development Environment
-  MATLAB Desktop
-  Matrices and arrays
-  Expressions
-  Controlling command window

##### Session 2




##### Graphics

-  Basic plotting
-  Editing plots
-  Mesh and surface plots
-  Handle graphics
-  Script and functions

### Session 3

-  Graphics user interfaces
-  Symbolic math toolbox
-  Calculus

#### **Linear algebra**







-  Solving Equations
-  PROJECTS
-  Test Practices

## **DAY 2**

### Session 1








#### **Images processing toolbox**

##### **Images in MATLAB**

-  Types of images
-  Types of image compression and standard like JPEG, GIF
-  Image arithmetic
-  Coordinate systems
-  Displaying images
-  Basic image related functions





### Session 2

#### **Spatial Transformation**

-  Interpolation
-  Resizing
-  Rotation
-  Cropping
-  Image sequences
-  Image arithmetic
-  Reading and writing image data

### Session 3




#### **Linear Filtering**

-  Convolution
-  Correlation
-  Filter Design
-  Use of IMFILTER function

## **DAY 3**

### **Session 1**


#### **Analyzing and Enhancing Images**

-  Pixel values and statistics
-  Image analysis
-  Image enhancement

#### **Region- Based Processing**









-  Filtering
-  Filling

#### **Color**




-  Conversion to different color spaces

### **Session 2**

#### **PROJECTS**

-  Image Acquisition
-  Image conversion
-  Image transformation
-  Blurring
-  Image matching
-  Motion detection
-  Edge Detection
- 

### **Sessions 3**

-  TESTING AND QUERIES
-  COMPETITION
-  CERTIFICATE DISTRIBUTION

#### **Competition winner:**

The winner of MATLAB competition will be awarded a cash prize worth Rs- 3000, a complete MATLAB Tool kit and a certificate of merit certified by Rlabz Edutech Pvt. Ltd.

*## Thank you ##*

We ensure that you will find our initiative extremely beneficial for your students. If you have any queries kindly get back to us. We are looking forward to a quick and positive response from you and a long term association with your esteemed organization.

#### **For any further details please contact us:**

**Pankaj Tiwari**  
**(Business Developer Manager)**  
**Rlabz Edutech Pvt. Ltd**  
**Cell: +91 9760657585**  
**E-mail: [pankaj.tiwari@rlabz.com](mailto:pankaj.tiwari@rlabz.com)**