2-Day Workshop Plan

MATLAB

Day	Time	Activity
Day 1	10:00 AM - 10:45 AM	Introduction to MATLAB: What is MATLAB? Overview of MATLAB environment, MATLAB syntax, and commands
Day 1	10:45 AM - 11:30 AM	MATLAB Workspace: Variables, data types, and operations (arrays, matrices, and cell arrays)
Day 1	11:30 AM - 11:45 AM	Break (15 minutes)
Day 1	11:45 AM - 1:00 PM	Basic MATLAB Programming: Writing scripts, functions, and control flow (if-else, loops, switch-case)
Day 1	1:00 PM - 2:00 PM	Lunch Break (1 hour)
Day 1	2:00 PM - 2:45 PM	Plotting and Data Visualization: Plotting basic graphs (line, bar, scatter plots), Customizing plots (titles, labels, legends)
Day 1	2:45 PM - 4:00 PM	Hands-On: Simple MATLAB Project: Create a program to visualize mathematical functions (e.g., plotting sin, cos functions)
Day 1	4:00 PM - 4:15 PM	Break (15 minutes)
Day 1	4:15 PM - 5:00 PM	Q&A and Day 1 Wrap-Up: Review of concepts, Discuss applications of MATLAB, Overview of Day 2

sltechhsolutions@gmail.com

91-8341475919

2-Day Workshop Plan

MATLAB

Day	Time	Activity
Day 2	10:00 AM - 10:45 AM	Advanced MATLAB Topics: Working with matrices, Matrix operations (multiplication, inversion, determinant)
Day 2	10:45 AM - 11:30 AM	File Handling in MATLAB: Reading and writing data (txt, csv, Excel files), Importing data into MATLAB
Day 2	11:30 AM - 11:45 AM	Break (15 minutes)
Day 2	11:45 AM - 1:00 PM	Signal Processing with MATLAB: Basic signal generation, Fourier transforms, Filtering signals
Day 2	1:00 PM - 2:00 PM	Lunch Break (1 hour)
Day 2	2:00 PM - 2:45 PM	MATLAB for Simulations: Using MATLAB for numerical simulations (solving equations, optimization problems)
Day 2	2:45 PM - 4:00 PM	Hands-On: Advanced MATLAB Project: Implement a signal processing task (e.g., designing a simple filter and applying it to data)
Day 2	4:00 PM - 4:15 PM	Break (15 minutes)
Day 2	4:15 PM - 5:00 PM	Q&A and Final Wrap-Up: Review of advanced topics, Discuss further learning paths, Certification distribution, Closing remarks

sltechhsolutions@gmail.com

91-8341475919