sciengineer

MATLAB for Data Processing and Visualization

SciEngineer's training courses are designed to help organizations and individuals close skills gaps, keep up-to-date with the industry-accepted best practices and achieve the greatest value from MathWorks® and COMSOL® Products.

MATLAB for Data Processing and Visualization

This one-day course focuses on importing and preparing data for data analytics applications. Topics discussed include importing data from multiple sources, processing data, producing informative customized graphics and working with irregular data.

Prerequisites

MATLAB Fundamentals

DURATION

1 day

LEVEL

Medium

TOPICS

Day 1

- Importing Data
- Processing Data
- Customizing Visualizations
- Working with Irregular Data

Importing Data

OBJECTIVE: Read text files that contain a mixture of data types, delimiters, and headers.

- Import a mixture of data types from arbitrarily formatted text files
- Import only required columns of data from a text file
- Import and merge data from multiple files

Processing Data

OBJECTIVE: Process raw imported data by extracting, manipulating, aggregating, and counting portions of data.

- Process data with missing elements
- Create and modify categorical arrays
- Aggregate, bin, and count groups of data

Customizing Visualizations

OBJECTIVE: Annotate and modify standard plots to produce informative customized graphics.

- Determine properties of graphics objects and their associated values
- Locate and manipulate graphics objects
- Customize plots by modifying properties of graphics objects

MATLAB for Data Processing and Visualization

Working with Irregular Data

OBJECTIVE: Import and visualize scattered data from text files with irregular formatting.

- Parse text files to determine formatting
- Import data from separate sections of a text file
- Extract data from container variables
- Interpolate irregularly spaced three-dimensional data
- Visualize three-dimensional data in two and three dimensions

SciEngineer's Training Services