

Introduction to MATLAB for Data Science

Course Duration: 01 Day

Course modules

Learn the basics of MATLAB® through this introductory tutorial on commonly used features and workflows. Get started with the MATLAB language and environment so that you can analyze science and engineering data.

Course modules



Module 01: Introduction to MATLAB

Familiarize yourself with the course.

Lessons:

- [Course Overview](#)



Module 02: Commands

Enter commands in MATLAB to perform calculations and create variables.

Lessons:

- [Enter Commands](#)
- [Name Variables](#)
- [Save and Load Variables](#)
- [Use Built-in Functions and Constants](#)



Module 03: MATLAB Desktop and Editor

Write and save your own MATLAB programs.

Lessons:

- [MATLAB Desktop and Editor](#)
- [The MATLAB Editor](#)
- [Run Scripts](#)
- [Debug MATLAB Code](#)

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Module 04: Vectors and Matrices

Create MATLAB variables that contain multiple elements.

Lessons:

- [Manually Enter Arrays](#)
- [Create Evenly Spaced Vectors](#)
- [Create Arrays with Functions](#)

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Module 05: Array Indexing and Modification

Use indexing to extract and modify rows, columns, and elements of MATLAB arrays.

Lessons:

- [Indexing](#)
- [Index into Arrays](#)
- [Extract Multiple Elements](#)
- [Change Values in Arrays](#)

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Module 06: Array Calculations

Perform calculations on entire arrays at once.

Lessons:

- [Perform Array Operations on Vectors](#)

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Module 07: Function Calls

Call functions with multiple outputs.

Lessons:

- [Request Multiple Outputs in Function Calls](#)

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Module 08: Plots

Visualize variables using plotting functions.

Lessons:

- [Plot Vectors](#)
- [Annotate Plots](#)



Module 09: Data Import

Bring data from external files into MATLAB.

Lessons:

- [Import Tool](#)
- [Import Data as a Table](#)



Module 10: Logical Arrays

Use relational operators and logical indexing to extract elements of interest from MATLAB arrays.

Lessons:

- [Logical Indexing](#)



Module 11: Programming

Write programs that execute code based on specified conditions.

Lessons:

- [Programming Constructs](#)
- [Decision Branching](#)
- [For Loops](#)



Module 12: Final Project

Apply concepts that you learned in this course to a project.

Lessons:

- [Project - Stellar Motion](#)
- [Project - Compare Stellar Spectra](#)



