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## MatPlotLib Tutorials



Email Contact: info@educba.com

### Course Overview

In this Course you get to learn:

- To create visualizations with Matplotlib.
- Creating simple graphs, using
   PyPlot to legends and layout. The
   advanced tutorials will focus on
   transformation tool, colormaps,
   annotations, rendering, and
   toolkits.
- About matplotlib and its implementation using python programming.

### MatPlotLib Tutorials Skills

We learn the following skills:

- Know how to have the data presented in a graphical manner in an application
- You will be ample comfortable to work
   with the python and its modules that
   are used to integrate this library in
   order to create an efficient
   application.
- Learning this course you give you an extra edge as the developers these days barely find themselves good with working on something that is even a bit complicated.

# **Course Features**



Course Duration-12+ Hours



Number of Courses



Verifiable Certificates



Lifetime Access



# About MatPlotLib

- MatPlotLib may be defined as the python library that is used to implement the functionality of graphical representation of data in the application developed in python.
- It consists of several components that help us to plot a twodimensional graph using the python script.

### **MatPlotLib Tutorials**

This is a Bundle Course that includes complete in-depth MatPlotLib
Tutorials combined into one
Complete Course.

This Bundle perfectly meets the requisite of the industry and gives you a better chance of being hired as a MatPlotLib Tutorials professional.

# 1 Matplotlib for Python Developers Beginners

#### **Section 1. Introduction**

Introduction to Matplolip

#### **Section 2. Simple Graphs**

- Simple Graphs
- Simple Graphs Continue
- More on Line Graphs
- Bar Graph
- Scatter Graph
- Using Text
- Annotation in Graph

#### **Section 3. Using Pyplot**

- Basic of Pyplot
- Basic of Pyplot Tex
- Basic Barh and Fill
- Complex Fill Demo
- Custom Dashed Lines and Bar Charts
- Inch and cms and Color Bars

#### **Section 5. Image Tutorial**

- Customizing Image
- Customizing Image Continue
- Customizing Plot
- Customizing Styles

#### Section 4. Sample Plot in Matplotlib

- Demo Image
- Pcolormesh and Pathpatch Demo
- Creating Streamplot
- Creating Streamplot Continue
- Eillpise Demo
- Eillpise Demo Continue
- Pie Chart
- Table Demo
- Log Demo and Polar Demo

#### **Section 1. Introduction**

Introduction to Matplotlib
 Intermediate

#### **Section 2. Legends**

- Simple Working with Legend
- Simple Working with Legends
   Continue
- More on Legends Part 1
- More on Legends Part 2

#### **Section 3. Figure Layout**

- Basic Customizing Figure
   Layout
- Advance Customizing Figure
   Layout
- More on Customizing Figure
   Layout
- More Examples
- Complex Nested Gridspec

#### **Section 4. Layout**

- Constrained Layout Guide
- Constrained Layout Guide
   Continue
- Padding
- Spacing
- Use with GridSpec
- More on Gridspec
- Examples on GridSpec
- Examples on GridSpec
   Continue
- Tight Layout Guide Basic
- Tight Layout Guide Advance

#### **Section 1. Introduction**

Introduction to Matplotlib

Advance Level

#### **Section 2. Path with Effect**

- Path Tutorial
- More on Path Tutorial
- Path Effect Guide

# Section 3. Transformation Tutorial

- Transformation Level 1
- Transformation Level 1 and Example
- Transformation Level 2 and Example

#### Section 4. Colors in Matplotlib

- Colors Tutorial
- Customized Colorbars
- Creating Colormaps Basic
- Creating Colormaps Advance

#### **Section 4. Colormap Normalization**

- Logarithmic and Symmetric
   Logarithmic
- Power-Law and Discrete bounds
- Two Linear Ranges

#### **Section 5. Choosing Colormaps**

- Choosing Colormaps
   Overview
- Classes of Colormaps
- Lightness of Matplotlib
   Colormaps
- Lightness of Matplotlib
   Colormaps Continue

#### Section 6. Text in Matplotlib

- Basic Text Command
- Legends and Annotations
- Text Properties

#### **Section 7. Annotations**

- Basic Annotation
- Annotation Polar
- Fancy Demo
- Connectionstyle Demo
- Using ConnectionPatch
- Zoom Effect Between
   Axes

# Section 8. Writing Mathematical Expression

- Simple Example
- Simple Example Continue

#### **Section 9. Typesetting**

- Saving Multipage PDF Files
- Modifying Parameters

# Section 10. Text Rendering and Toolkits

- Text Rendering with LaTex
- Simple Axes Grid
- Parasite Axes
- Anchored Artists
- RGB Axes
- Simple Axes Artist
- Axes Artist with Parasite
- Floating Axis Demo
- Axes Artist Demo
- Line 3D
- Bar 3D



Why should I learn about the MatPlotLib library?

The application that is being developed these days is supposed to be more efficient and loaded with lots of functionalities as compared to the traditional applications. In order to develop such kind of application, one should know how to bring graphical features in the application which can be done using this library. One should learn MatPlotLib, as it gives them an edge when it comes to developing a perfect application that can present the data in a graphical manner.

How long it may take to learn MatPlotLib?

Depending upon how familiar you are with python, your learning time varies. If you are a python professional and have working experience in it, you will be able to learn it in the matter of a month. The beginners who have basic exposure of python or any other programming language may take two to four months to master using this. It's also based on how many hours you give every day to learn this.



### **Customer Reviews**



The course is well structured, The pace of the course is also very good and the instructor is well versed on the subject. All examples are clear and easy to understand and very applicable. I recommend taking this class if someone wants to be either familiar with data visualization.

**Kevin Sebastian** 

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During the initial part of the MatPlotLib Tutorials, which involves the study and creation of a visual representation of data is also an art and science of itself. then we studied the objective and understanding of data visualization which was very knowledgeable. Later the common techniques and the different type of graphs used to perform data visualization. All in all a valuable course on MatPlotLib.

Jeremy Sikira



### MatPlotlib Tutorials

For Queries please contact:

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