

Data Visualization with Python and Matplotlib

Modality: Self-Paced Learning

Duration: 6 Hours

About this course:

More and more people are realising the vast benefits and uses of analysing big data. However, the majority of people lack the skills and the time needed to understand this data in its original form. That's where data visualisation comes in; creating easy to read, simple to understand graphs, charts and other visual representations of data. Python 3 and Matplotlib are the most easily accessible and efficient to use programs to do just this. With over 58 lectures and 6 hours of content, this course covers almost every major chart that Matplotlib is capable of providing. Intended for students who already have a basic understanding of Python, you'll take a step-by-step approach to create line graphs, scatter plots, stack plots, pie charts, bar charts, 3D lines, 3D wire frames, 3D bar charts, 3D scatter plots, geographic maps, live updating graphs, and virtually anything else you can think of! Starting with basic functions like labels, titles, window buttons and legends, you'll then move onto each of the most popular types of graph, covering how to import data from both a CSV and NumPy. You'll then move on to more advanced features like customised spines, styles, annotations, averages and indicators, geographical plotting with Basemap and advanced wireframes. This course has been specially designed for students who want to learn a variety of ways to visually display python data. On completion of this course, you will not only have gained a deep understanding of the options available for visualising data, but you'll have the know-how to create well presented, visually appealing graphs too.

The average salary for Python Developer is **\$92,000** per year.

Course Objective:

After completing this course, students will be able to:

- Learn Big Data Python
- Visualise multiple forms of 2D and 3D graphs; line graphs, scatter plots, bar charts, etc.
- Load and organise data from various sources for visualisation
- Create and customise live graphs
- Add finesse and style to make your graphs visually appealing
- Python Data Visualisation made Easy

Audience:

This course is intended for:

- Anyone who wants to learn data visualization in Python.

Prerequisites:

- Basic Python programming experience.

Suggested prerequisites courses:

- [Python Programming for Beginners](#)
- [Python for Beginners](#)
- [Python Object Oriented Programming Fundamentals](#)

Course Outline:

- Course Introduction
- Different types of basic Matplotlib charts
- Basic Customization Options
- Advanced Customization Options
- Geographical Plotting with Basemap
- 3D graphing
- Course Conclusion