

Document Generated: 12/18/2025

Learning Style: On Demand

Technology:

Difficulty: Beginner

Course Duration: 6 Hours

Introduction to Python for Data Science



About the Course:

Python is amongst the fastest growing programming languages in the world. Since it's a very beginner friendly and user friendly language in general, it has been used by people from a lot of fields especially for the ones in data science for the purpose of Data Analysis. The community around this program has created ways to work with it

in the most efficient way possible.

This course teaches you all the basics revolving around python. From the very basics like arithmetic and variables to how to manage data structures which include Numpy arrays, Python lists and Pandas DataFrames. You will also learn about the different functions of Python and how the control flow works. Another important part of this course is being able to make your own visualizations with the aid of python. All of this will be based on real data.

Course Objectives:

- Learning the basics of Python
- How to make and manipulate the Python lists
- Learn different functions of python and being able to import lists
- Knowledge of building Numpy arrays and being able to perform different calculations
- How to make build and customize plots that are based on real data
- Being able to supercharge your scripts with the aid of control flow and familiarizing yourself with the Panda DataFrame

Audience:

- Data Scientists

Prerequisites:

- You should have basic knowledge and experience of working with different data that could be either from excel, text files or other databases.

Course Outline:

This Course Includes:

- Course Introduction
- Google Colab Overview
- Introduction to Python: Syntax
- Pythonic Functions and Good Practices
- Linear Algebra: Numpy
- Plotting: Matplotlib and Seaborn
- Dataframes: Pandas