



Information Technology

Big Data Analytics with Python

Course Introduction

Python has been one of the most adaptable, and robust open-source languages that are easy to learn and uses powerful libraries for data manipulation and analysis. For many years now, Python has been used in scientific computing and mathematical domains such as physics, finance, oil and gas, and signal processing.

This Big Data Analytics with Python course provides a complete overview of data analysis techniques using Python. A Data Scientist is one of the strongest professions today and Python is a crucial skill for such roles.

The Big Data Analytics with Python course teaches you to master the concepts of Python programming. Through this training, you will gain knowledge of the essential tools of Data Analytics with Python.

Target Audience

This program is intended for professionals who are seeking to widen their knowledge on network technologies and/or prepare themselves for CompTIA Network+ Examination and Certification.

Learning Objectives

- Introduction to Data Science
- Different Sectors Using Data Science
- Knowledge Check
- Exploratory Data Analysis
- Introduction to Statistics

Course Outline

- Day 01

MODULE 1: DATA SCIENCE OVERVIEW

- Introduction to Data Science
- Different Sectors Using Data Science
- Purpose and Components of Python

- Day 02

MODULE 2: DATA ANALYTICS OVERVIEW

- Data Analytics Process
- Knowledge Check
- Exploratory Data Analysis
- EDA-Quantitative Technique
- EDA – Graphical Technique
- Data Analytics Conclusion or Predictions
- Data Analytics Communication
- Data Types for Plotting
- Data Types and Plotting

- Day 03

MODULE 3: STATISTICAL ANALYSIS AND BUSINESS APPLICATIONS

- Introduction to Statistics
- Statistical and Non-statistical Analysis
- Major Categories of Statistics
- Statistical Analysis Considerations
- Population and Sample
- Statistical Analysis Process
- Data Distribution
- Dispersion
- Histogram

- Correlation and Inferential Statistics
- **Day 04**

MODULE 4 PYTHON ENVIRONMENT SETUP AND ESSENTIALS

- Anaconda
 - Installation of Anaconda Python Distribution
 - Data Types with Python
 - Basic Operators and Functions
- **Day 05**

MODULE 5: MATHEMATICAL COMPUTING WITH PYTHON (NUMPY)

- Introduction to NumPy
- Activity-Sequence it Right
- Creating and Printing an nd array
- Class and Attributes of nd array
- Basic Operations
- Copy and Views
- Mathematical Functions of NumPy
- Evaluate the datasets containing GDPs of different countries

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 21, 2025	April 25, 2025	5 days	5950.00 \$	Netherlands - Amsterdam
May 19, 2025	May 23, 2025	5 days	5950.00 \$	Spain - Madrid
June 16, 2025	June 20, 2025	5 days	4250.00 \$	UAE - Abu Dhabi
Sept. 8, 2025	Sept. 12, 2025	5 days	4250.00 \$	UAE - Dubai

FROM	TO	DURATION	FEEs	LOCATION
Dec. 29, 2025	Jan. 2, 2026	5 days	4950.00 \$	Singapore - Singapore