Training on Big Data analytics using Python

Professional Development Training Course Outline

Category	Research and Data Analysis	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

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. 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

Programme Curriculum

Training on Big Data analytics using Python

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Day 1: Introduction to Big Data and Python

- Morning:
  - Welcome and Introduction to the Course
  - Overview of Big Data and its Challenges
  - Introduction to Python for Data Analytics
  - Setting up Python Environment (Anaconda, Jupyter Notebook)
- Afternoon:
  - Basic Python Programming Concepts (Variables, Data Types, Loops, Functions)
  - Introduction to Pandas (DataFrames and Series)

Day 2: Data Manipulation and Preprocessing

- Morning:
    - Data Cleaning and Handling Missing Values
    - Data Transformation (e.g., filtering, sorting, merging)
    - Data Visualization with Matplotlib and Seaborn
- Afternoon:
    - Introduction to NumPy for Numerical Operations
    - Exploratory Data Analysis (EDA)
    - Case Study: Exploring a Real-world Dataset

Day 3: Big Data Tools and Distributed Computing

- Morning:
    - Introduction to Big Data Technologies (Hadoop, Spark)
    - Overview of HDFS (Hadoop Distributed File System)
    - Setting up a Hadoop/Spark Cluster (Local or Cloud)
- Afternoon:
    - Introduction to PySpark
    - Working with RDDs (Resilient Distributed Datasets)
    - Basic Data Processing with PySpark

Day 4: Advanced Data Analytics with Python

- Morning:
    - Machine Learning with Scikit-Learn
    - Model Training and Evaluation
    - Feature Engineering
- Afternoon:
    - Introduction to Deep Learning with TensorFlow/Keras
    - Neural Networks and Deep Learning Concepts
    - Hands-on Deep Learning Exercise

Day 5: Big Data Analytics and Conclusion

- Morning:
    - Large-scale Data Processing with PySpark
    - Building Data Pipelines
    - Real-time Data Processing (Optional)
- Afternoon:
    - Final Project: Applying Big Data Analytics on a Real Dataset
    - Presentation of Projects
    - Q&A Session
    - Course Conclusion and Certification

Methodology

The instructor led trainings are delivered using a blended learning approach and comprises of presentations, guided sessions of practical exercise, web-based tutorials and group work. Our facilitators are seasoned industry experts with years of experience, working as professional and trainers in these fields.

Key Notes

i. The participant must be conversant with English.

ii. Upon completion of training the participant will be issued with an Authorized Training Certificate

iii. Course duration is flexible and the contents can be modified to fit any number of days.

iv. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

v. One-year post-training support Consultation and Coaching provided after the course.

vi. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

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Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com