Training Course:
Big Data Analysis

24 - 28 August 2025
Istanbul (Turkey)
DoubleTree by Hilton Istanbul Esentepe

Training Course:
Big Data Analysis

Introduction

In today's data-driven world, organizations are increasingly relying on big data analytics to gain insights, detect anomalies, and make informed strategic decisions especially in the financial sector. This training program, designed by Global Horizon Training Center, provides a practical foundation in Python programming and financial data analysis. Participants will learn how to clean, visualize, and interpret large datasets, identify usage patterns, detect suspicious activity, build predictive models, and generate interactive reports that support decision-making.

Through real-world examples and practical exercises focused on transaction and card usage data, the course bridges the gap between technical data skills and business intelligence applications, enabling participants to extract maximum value from financial data.

Target Audience

This training program is ideal for:

- Data analysts and data scientists in the financial and banking sectors

- IT professionals and software engineers working with transactional data

- Business analysts and decision-makers who rely on reports and dashboards

- Risk and fraud analysts

- Finance professionals looking to enhance their technical data analysis skills

- Any professionals seeking to enter the field of big data analytics

Objectives

By the end of this 5-day training, participants will be able to:

- Understand and apply the basics of Python for financial data analysis

- Read, clean, and preprocess data from CSV and Excel files

- Use pandas, numpy, and matplotlib for analysis and visualization

- Analyze usage trends and identify suspicious activity

- Develop simple predictive models to forecast outcomes and classify risks

- Build visual dashboards and generate interactive management reports

- Provide actionable recommendations based on analytical findings

Outlines:

Day 1:

Python Basics for Data Analysis

- Variables and Data Types

- Lists, Dictionaries, and Loops

- Writing Simple Functions

- Introduction to Key Libraries: pandas, numpy, matplotlib

- Reading and Parsing Files CSV, Excel

- Hands-on Exercises:

  - Loading and analyzing transaction data from payment cards

  - Visualizing data distributions

Day 2:

Financial Data Fundamentals

- Reading and Cleaning Financial Datasets CSV & Excel

- Data Preprocessing: Handling Nulls, Filtering Rows

- Grouping and Aggregation by:

  - Transaction Type

  - Bank/Issuer

  - Region/Governorate

- Practical Exercise:

  - Summarizing financial operations and preparing data for further analysis

Day 3:

Visual Analysis and Pattern Detection

- Daily and Monthly Usage Analysis

- Identifying Anomalies and Suspicious Activities

- Creating Dashboards to Display:

    - Success and Failure Rates

    - Transaction Volumes

- Hands-on Exercise:

    - Building visualizations using matplotlib and pandas.plot

    - Custom dashboards for operational monitoring

Day 4:

Forecasting and Modeling

- Introduction to Forecasting Techniques using Python

- Modeling:

    - Transaction Growth

    - Failure Rate Prediction

    - Fraud Detection from Historical Patterns

- Risk Classification Based on Usage Behavior

- Hands-on Exercise:

    - Using logistic regression or decision trees for classification

    - Predictive modeling with real-world card data samples

Day 5:

Reporting and Decision Support

- Creating Interactive Reports for Management

- Exporting Reports to PDF and Excel

- Writing Data-Driven Recommendations

- Final Exercise:

- Produce a summary report with visualizations, KPIs, and executive recommendations
- Simulated stakeholder presentation

Registration form on the Training Course:
Big Data Analysis

Training Course code: IT236078 From: 24 - 28 August 2025 Venue: Istanbul (Turkey) - DoubleTree by Hilton Istanbul Esentepe Training Course Fees: 6000 ⬜ Euro

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