KOENIG SOLUTIONS · COURSE OUTLINE

Data Analytics: Power BI, Python, SQL & Power Query (Koenig Original)

Complete Data Analytics trainings with 15 Projects on Real Time Data

48 Hours	4	38
DURATION	MODULES	TOPICS

COURSE OVERVIEW

This course covers data analytics across Power Excel, Python, Power Query, Power BI and SQL. It begins with cleaning, connecting, transforming and modelling data in Excel to build interactive dashboards, then moves to Python for data structures, extraction with Pandas, cleaning, transformation and visualisation using NumPy, Matplotlib and Seaborn. It continues with Power Query for data transformation, modelling and report creation, applying DAX for insights and predictions, and designing dashboards with Power BI Service. It concludes with SQL, covering RDBMS concepts, DDL, DCL and DML commands, writing queries, filtering, sorting, grouping, joins, subqueries, constraints and data modelling.

WHO THIS COURSE IS FOR

- **Data Analysts**
- **Business Analysts**
- **BI Developers**
- **Database Administrators**
- **Reporting Analysts**
- **Excel Power Users**

LEARNING OBJECTIVES

- Clean and transform data using Power Excel and Power Query
- Connect to different data sources and merge datasets
- Build data models and define relationships between tables
- Design interactive dashboards in Excel and Power BI Service
- Apply Python data structures and Pandas for data extraction
- Visualise data using Matplotlib, Seaborn and NumPy arrays
- Write SQL queries with filters, joins, subqueries and grouping
- Apply DAX for data insights and predictions in Power BI

COURSE SYLLABUS

4 Modules, 38 Topics

01

Power Excel

TOPICS

Data Cleaning · Connecting to Different Sources · Data Transformation · Append & Merge · Data Modelling · Data Relationship · Designing Interactive Dynamic Dashboard

02

Python Data Analysis

TOPICS

- Python programming Concepts
- Python Data Structures
- Working with Dates & String
- Data Extraction with Pandas
- Data cleaning
- Data Transformation
- Visualizing & analyzing data
- NumPy Array Concepts
- Visualization using Matplotlib
- Visualization using Seaborn

03

Power Query

TOPICS

- Data Cleaning
- Data Transformations
- Working with multiple queries
- Data Modelling
- Creating Reports
- Report Formatting
- Using DAX for insights
- Data Predictions
- Designing Dashboard with Power BI Service

04

SQL

TOPICS

- RDBMS Concepts
- DDL Commands
- DCL Commands
- DML Commands
- Writing queries
- Filters
- Data Sorting
- Grouping Data
- Different Joins
- Subquery
- Constraints
- Data Modelling

NOTES

Projects Covered

- Power Excel: Complete Data Analytics on FOODMART data.(8 CSV Files)
- Power Excel: Interactive Dashboard on Sales Data with Different regions
- Power Excel: Sales Performance & Marketing Dashboard
- Power Excel: Store Data Analysis With Insights.
- Power Query & Analysis: Capstone Project on Adventure Works Supermarket Dataset
- Power Query & Analysis: Capstone Project on Maven Market Dataset
- Power Query & Analysis: Financial Credit Card Analysis
- Power Query & Analysis: HR data Analytics
- Power Query & Analysis: Sales Data Dashboard with DAX
- Power Query & Analysis: Project Based on Taxi Data.
- Python: Complete Data Analytics on store Data
- Python: Data Analytics on Sports Data.
- Python: Data Analytics on Amazon Forest Data
- SQL: Data Analysis and insights on Employee data.
- SQL: Data Analysis on Store sales Data

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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