ACE IT CAREERS
BEST CAREER BUILDER

DATA & ANALYTICS · COURSE SYLLABUS

Data Analyst (Python, SQL & Power BI)

A 60-day intensive program: Python for data analysis in month one, then SQL and Power BI in month two, with projects on real-world datasets.

60 Days (8 Weeks) | Live online | Placement support

Syllabus

WEEK 1

Introduction to Python

- Days 1–2: Python setup with Anaconda and Jupyter Notebooks
- Days 3–4: Variables, data types, conditionals and loops
- Days 5–7: Functions, modules and libraries (NumPy, Pandas)

WEEK 2

Data handling with Pandas

- Days 8–9: Series and DataFrames
- Days 10–12: Data cleaning, missing values and duplicates
- Days 13–14: Filtering, sorting and grouping data

WEEK 3

Exploratory data analysis (EDA)

- Days 15–16: Visualization with Matplotlib and Seaborn
- Days 17–18: Descriptive statistics: mean, median, mode, standard deviation
- Days 19–20: Outliers, correlation and covariance
- Day 21: Case study: EDA on a sample dataset

WEEK 4

Advanced data analysis

- Days 22–23: Time series data: resampling, shifting, rolling
- Days 24–25: Text data: string operations and cleaning
- Days 26–27: Merging and joining data with Pandas
- Day 28: Final Python project on a real-world dataset

WEEK 5

SQL basics and queries

- Days 29–31: Relational databases and setup (MySQL/PostgreSQL)
- Days 32–34: SELECT, WHERE, LIMIT and ORDER BY
- Days 35–37: INNER, LEFT, RIGHT and FULL OUTER joins
- Days 38–39: GROUP BY, HAVING, COUNT, SUM and AVG

WEEK 6

Advanced SQL

- Days 40–41: Subqueries and nested queries
- Days 42–43: Window functions: ROW_NUMBER, RANK, DENSE_RANK
- Days 44–45: CTEs, views and indexing

WEEK 7

Introduction to Power BI

- Days 46–48: Power BI Desktop, Service and Gateway
- Days 49–51: Importing data from Excel, SQL databases and CSV
- Days 52–53: Cleaning and transforming data with Power Query

WEEK 8

Visualization and dashboards

- Days 54–56: Charts, maps, tables and KPIs
- Days 57–58: Interactive dashboards with filters, slicers and drill-throughs
- Days 59–60: Publishing and sharing reports in Power BI Service

Included with every course

- Live instructor-led classes in US time zones, with session recordings
- Real-time project work and a certificate
- Resume preparation and marketing, mock interviews and placement support