



PYTHON TRAINING

Python Data Analytics Course

Unlock data insights with Python. Acquire skills in data manipulation, visualization, and statistical analysis for real-world applications.

DURATION

40 Hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

Unlock the power of data with Computer Pride's intermediate Python Data Analytics Course. This comprehensive program is meticulously designed for professionals and aspiring data enthusiasts looking to master data manipulation, analysis, and visualization using Python's robust ecosystem. You'll delve into essential libraries like Pandas for data wrangling, NumPy for numerical operations, and a suite of powerful visualization tools such as Matplotlib and Seaborn, enabling you to transform raw data into actionable insights.

Through hands-on projects and real-world case studies, this course will equip you with the practical skills necessary to perform exploratory data analysis, build predictive models, and communicate findings effectively. Graduates will gain a significant competitive edge in the job market, capable of driving data-driven decision-making within organizations and contributing to business intelligence, research, and advanced analytics initiatives. Elevate your analytical capabilities and position yourself at the forefront of the data revolution with this indispensable certification.

Duration	40 Hours
Level	Intermediate
Vendor	Python

COURSE CURRICULUM

01 Module 1: Python Fundamentals for Data Analysis

- Python Environment Setup (Anaconda, Jupyter Notebook)
- Review of Python Data Structures (Lists, Dictionaries, Tuples, Sets)
- Control Flow and Functions in Python
- Introduction to NumPy for Numerical Computing
- Array operations, indexing, and slicing with NumPy
- Mathematical operations and aggregation functions

02 Module 2: Data Manipulation with Pandas

- Introduction to Pandas DataFrames and Series
- Importing and Exporting Data (CSV, Excel, SQL databases)
- Data Cleaning and Preprocessing (handling missing values, duplicates, data types)
- Data Selection, Filtering, and Indexing
- Merging, Joining, and Concatenating DataFrames
- Grouping and Aggregation (groupby operations)

03 Module 3: Data Visualization

- Introduction to Matplotlib for Static Visualizations
- Creating various plot types (line, bar, scatter, histogram, box plots)
- Customizing plots: titles, labels, legends, colors
- Advanced Visualization with Seaborn
- Statistical plots (relplot, displot, catplot)
- Creating interactive visualizations (brief introduction to Plotly/Bokeh)

04 Module 4: Exploratory Data Analysis (EDA)

- Understanding Data Distributions and Central Tendency
- Identifying Outliers and Anomalies
- Correlation and Covariance Analysis

- Hypothesis Testing Basics for Data Analysis
- Feature Engineering techniques
- Practical EDA Case Studies

05 Module 5: Introduction to Machine Learning with Python

- Fundamentals of Supervised vs. Unsupervised Learning
- Introduction to Scikit-learn library
- Simple Linear Regression and Logistic Regression
- Model Training, Evaluation, and Validation
- Clustering techniques (K-Means)
- Building a basic predictive model project

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Junior Data Analyst specializing in Python-based reporting and dashboarding**
- > **Business Intelligence Developer leveraging Python for data extraction and transformation**
- > **Entry-Level Machine Learning Assistant focused on data preprocessing and feature engineering**

FREQUENTLY ASKED QUESTIONS

Q: What are the prerequisites for enrolling in the Python Data Analytics Course?

To get the most out of this intermediate-level course, students should have a foundational understanding of Python programming concepts, including variables, data types, basic control flow (loops, conditionals), and functions. Prior exposure to basic statistical concepts will also be beneficial, though not strictly required, as key statistical ideas will be revisited in the context of data analysis.

Q: Will I work on real-world projects during the course to build a portfolio?

Absolutely. This course emphasizes practical application. You will engage in multiple hands-on projects, including data cleaning challenges, comprehensive exploratory data analysis (EDA) of various datasets, and building simple machine learning models. These projects are designed to simulate real-world scenarios, allowing you to develop a robust portfolio showcasing your Python data analytics skills to potential employers.

Q: How does this course prepare me for a career in data analysis specifically in the Kenyan market?

This course is tailored to equip you with highly sought-after skills in the rapidly growing data analytics sector within Kenya and globally. You'll gain proficiency in industry-standard tools like Pandas, NumPy, and Matplotlib, which are essential for roles in finance, telecommunications, retail, and government sectors. The practical case studies will often draw parallels to local data challenges, ensuring your skills are directly applicable to the needs of Kenyan businesses looking for data-driven insights.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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