



PYTHON TRAINING

Python Data Analyst

Become a Python Data Analyst. Master data manipulation, visualization, and statistical analysis for powerful insights.

DURATION

2 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 our "Python Data Analyst" course, meticulously designed for intermediate learners aiming to master the essential tools and techniques for data analysis using Python. This comprehensive program from Computer Pride delves into foundational Python concepts, rapidly progressing to specialized libraries like Pandas for robust data manipulation, NumPy for numerical operations, and Matplotlib and Seaborn for compelling data visualization. You'll learn to clean, transform, analyze, and interpret complex datasets, extracting actionable insights that drive informed decision-making.

Duration	2 hours
Level	Intermediate
Vendor	Python

COURSE CURRICULUM

01 Module 1: Python Fundamentals for Data Analysis

- Setting up your Python environment (Anaconda, Jupyter Notebook)
- Python data structures: Lists, Tuples, Dictionaries, Sets
- Control flow: Loops and Conditionals
- Functions and basic error handling
- Introduction to NumPy for numerical computing

02 Module 2: Data Manipulation with Pandas

- Pandas DataFrames and Series
- Loading and saving data (CSV, Excel, JSON, SQL)
- Data indexing, selection, and filtering
- Handling missing data (NaN values)
- Merging, joining, and concatenating DataFrames

03 Module 3: Data Cleaning and Preprocessing

- Identifying and correcting data types
- Removing duplicates and handling outliers
- Feature scaling and transformation techniques
- Working with categorical data
- Text data preprocessing basics

04 Module 4: Data Visualization with Matplotlib and Seaborn

- Introduction to Matplotlib for basic plotting
- Creating scatter plots, line plots, bar charts, and histograms
- Advanced visualizations with Seaborn: heatmaps, box plots, violin plots
- Customizing plots: titles, labels, legends, colors
- Building interactive visualizations (introduction)

05 Module 5: Exploratory Data Analysis and Basic Statistics

- Descriptive statistics in Python (mean, median, mode, standard deviation)
- Correlation and covariance analysis
- Hypothesis testing fundamentals
- Performing A/B testing analysis with Python

- Case studies in exploratory data analysis

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Junior Data Analyst**
- > **Business Intelligence Analyst specializing in Python**
- > **Data Reporting Specialist**

FREQUENTLY ASKED QUESTIONS

Q: What are the prerequisites for enrolling in the Python Data Analyst course?

To get the most out of this course, we recommend a foundational understanding of programming concepts, ideally with some exposure to Python syntax. Familiarity with basic mathematics and statistical concepts is also beneficial, though not strictly required, as key statistical tools will be covered within the context of data analysis.

Q: Will this course teach me how to build complete data analysis projects, and what kind of projects can I expect to work on?

Yes, this course emphasizes hands-on learning. While the 2-hour duration focuses on core skills, it provides a robust foundation. You'll engage in practical exercises and mini-projects that involve cleaning real-world datasets, performing exploratory data analysis, and generating insightful visualizations. While a full end-to-end project isn't feasible in 2 hours, you'll gain the essential skills to confidently tackle subsequent complex data analysis challenges independently or in further studies.

Q: How does this Python Data Analyst course prepare me for roles beyond entry-level, and what specific skills will I gain that are sought by employers?

This course is designed to equip you with the practical, in-demand skills necessary for a successful career in data analysis. You will master critical techniques like data wrangling with Pandas, statistical inference with NumPy, and impactful data storytelling through Matplotlib and Seaborn. These proficiencies are highly valued by employers for roles such as Junior Data Analyst, Business Intelligence Analyst, and Data Reporting Specialist, enabling you to extract meaningful insights and contribute to data-driven decision-making processes.

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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