



PYTHON TRAINING

Python Bootcamp Training Course

Master Python programming in this bootcamp. Develop robust applications and automate tasks efficiently.

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 Python with Computer Pride's intensive Python Bootcamp Training Course, designed for aspiring developers and professionals looking to significantly enhance their coding capabilities. This intermediate-level program rapidly builds a strong foundation in Python programming, moving beyond basic syntax to cover essential data structures, object-oriented programming principles, and practical application development. You'll gain hands-on experience with Python 3, mastering concepts critical for building robust and efficient applications.

This bootcamp dives into core technologies by exploring Python's rich ecosystem, including an introduction to fundamental libraries like NumPy for numerical computing, Pandas for data manipulation and analysis, and Matplotlib for data visualization. Participants will engage in practical exercises and projects that simulate real-world scenarios, ensuring a deep understanding of how Python is used in areas such as scripting, data processing, and automation. Our expert-led instruction focuses on best practices, problem-solving techniques, and writing clean, maintainable code.

Upon completion, you will possess the confidence and skills to tackle complex programming challenges, automate repetitive tasks, and contribute effectively to Python-driven projects. This certification not only validates your proficiency but also significantly boosts your professional marketability, paving the way for advanced roles in software development, data science, and IT automation.

Duration	2 hours
Level	Intermediate
Vendor	Python

COURSE CURRICULUM

01 Module 1: Python Fundamentals and Control Flow

- Introduction to Python 3 syntax and environment setup
- Variables, data types (integers, floats, strings, booleans)
- Operators (arithmetic, assignment, comparison, logical)
- Conditional statements (if, elif, else)
- Looping constructs (for, while loops, break, continue)

02 Module 2: Core Data Structures and Functions

- Lists: creation, manipulation, list comprehensions
- Tuples: immutability and common uses
- Dictionaries: key-value pairs, methods, nested dictionaries
- Sets: unique elements and set operations
- Defining and calling functions, parameters, return values
- Lambda functions and higher-order functions

03 Module 3: Object-Oriented Programming (OOP) in Python

- Introduction to OOP concepts (classes, objects, encapsulation)
- Creating classes and instances
- Attributes and methods
- Inheritance and polymorphism
- Special methods (`__init__`, `__str__`)

04 Module 4: File Handling and Error Management

- Reading from and writing to text files
- Working with CSV files
- Exception handling (try, except, finally blocks)
- Custom exceptions
- Logging in Python

05 Module 5: Introduction to Essential Python Libraries

- NumPy basics: arrays, array operations, broadcasting
- Pandas DataFrames and Series: data loading, cleaning, manipulation
- Matplotlib for basic data visualization: line plots, bar charts, scatter plots
- Introduction to regular expressions for text processing

06 Module 6: Practical Application and Project

- Integrating learned concepts into a practical project
- Basic web scraping with Requests and BeautifulSoup (overview)
- Scripting for task automation examples
- Version control basics with Git (introduction)
- Project deployment considerations

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Junior Python Developer (focusing on scripting and application logic)**
- > **Data Analysis Assistant (leveraging Python for data manipulation and reporting)**
- > **Automation Scripting Specialist (creating scripts for system administration and process automation)**

FREQUENTLY ASKED QUESTIONS

Q: What kind of practical projects will I complete to demonstrate my Python skills during this bootcamp?

Throughout this Python Bootcamp, you will engage in hands-on coding challenges and a capstone project that consolidates your learning. Projects typically involve tasks like building a simple command-line application, performing data cleaning and analysis on a dataset using Pandas, creating basic visualizations with Matplotlib, or automating a file management task. These projects are designed to equip you with a portfolio-worthy demonstration of your Python proficiency.

Q: What foundational programming knowledge or prerequisites are recommended before enrolling in this Intermediate Python Bootcamp Training Course?

While this is an intermediate course, a basic understanding of programming concepts is highly beneficial. You should be familiar with fundamental computer operations and have some exposure to logical thinking and problem-solving. Prior experience with any programming language, even at a beginner level, will help you grasp Python concepts more quickly. We recommend completing an introductory Python course or having self-taught basic syntax knowledge before enrolling.

Q: How will this specific Python Bootcamp prepare me for career pathways in fields like data analysis or IT

automation?

This bootcamp specifically integrates modules on essential libraries like NumPy and Pandas, which are foundational for data analysis, enabling you to manipulate and clean datasets efficiently. For IT automation, the course's emphasis on functions, file handling, and error management provides the core skills needed to write robust scripts for task automation. The practical project module often includes examples that directly apply to these career paths, preparing you to tackle real-world challenges in data processing and system automation.

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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