PYTHON TRAINING

Python Ai Course

Develop powerful AI models using Python. Gain practical skills in machine learning and deep learning applications.

DURATION
2 hours

LEVEL
Intermediate

FORMAT
Instructor-Led

- Globally Recognized Certification
- Expert-Led Hands-On Training
- Flexible Scheduling

Computer Pride | 1st Floor, ICEA Building, Kenyatta Avenue, Nairobi | www.computer-pride.co.ke

COURSE OVERVIEW

Unlock the power of Artificial Intelligence with Python in this intensive 2-hour intermediate course from Computer Pride. Designed for developers and data enthusiasts who have a foundational understanding of Python, this program delves into the core concepts and practical applications of AI. You will learn to leverage Python's rich ecosystem of libraries, including NumPy, Pandas, Scikit-learn, and an introduction to deep learning frameworks, to build intelligent systems and solve real-world problems.

This course focuses on practical, hands-on learning, equipping you with the skills to implement machine learning algorithms, understand data preprocessing, and grasp the fundamentals of neural networks. By the end of the program, you'll be able to confidently embark on AI projects, analyze complex datasets, and lay a strong foundation for a career in the rapidly expanding field of artificial intelligence. Enhance your professional toolkit and position yourself at the forefront of technological innovation.

Gain a competitive edge by mastering the essential techniques of AI development using the most popular programming language in the domain. This certification not only boosts your technical proficiency but also provides a clear pathway to advanced AI roles, making you a valuable asset in any data-driven organization. Elevate your career prospects and contribute to the future of intelligent systems.

Duration	2 hours
Level	Intermediate
Vendor	Python

COURSE CURRICULUM

01 Module 1: Introduction to AI & Python's Role

- What is Artificial Intelligence? (Brief overview)
- Why Python for AI? (Key libraries and ecosystem)
- Setting up your Python AI environment (Jupyter, essential libraries)
- Core Python concepts for AI (NumPy for numerical operations)

02 Module 2: Data Handling and Preprocessing

- Introduction to Pandas for data manipulation and analysis
- Loading and inspecting datasets
- Data cleaning techniques (missing values, outliers)
- Feature scaling and encoding for machine learning readiness

03 Module 3: Fundamentals of Machine Learning

- Overview of supervised vs. unsupervised learning
- Introduction to Scikit-learn library
- Linear Regression: Theory and practical implementation
- Classification basics: Decision Trees and K-Nearest Neighbors
- Model evaluation metrics (accuracy, precision, recall - brief)

04 Module 4: Brief Introduction to Neural Networks

- What are Neural Networks? (Basic concepts)
- Perceptrons and multi-layer perceptrons (High-level explanation)

- Introduction to deep learning frameworks (TensorFlow/Keras overview)
- Simple neural network example (conceptual and code walk-through)

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

> **Junior AI Developer focusing on Python-based machine learning models**

> **Data Analyst specializing in applying AI techniques for insights and predictions**

> **Machine Learning Engineer Assistant building and deploying basic predictive systems**

FREQUENTLY ASKED QUESTIONS

Q: What specific AI problems will I be able to solve after completing this 2-hour Python AI Course?

Upon completing this course, you will be equipped to tackle foundational AI problems such as building simple predictive models (e.g., predicting house prices, classifying data points) and performing essential data preprocessing for machine learning projects. You'll understand the basics of implementing regression and classification algorithms, and have a high-level conceptual grasp of neural networks, enabling you to contribute to entry-level AI tasks and understand more complex AI systems.

Q: What are the prerequisite skills or knowledge required beyond basic Python for this intermediate Python AI Course?

To get the most out of this intermediate course, participants should have a solid grasp of fundamental Python programming concepts, including data structures (lists, dictionaries), control flow (loops, conditionals), and functions. While we will briefly touch on core libraries, prior exposure to NumPy or Pandas would be beneficial but is not strictly required, as the course will provide a quick introduction to their use in an AI context.

Q: How does this course prepare me for more advanced AI roles or certifications?

This Python AI Course serves as a crucial stepping stone by building a strong practical foundation in Python for AI. You'll gain hands-on experience with core libraries like Pandas and Scikit-learn, and get an initial exposure to deep learning concepts. This knowledge is essential for pursuing more specialized certifications in areas like Deep Learning with TensorFlow/PyTorch, Advanced Machine Learning, or Data Science, as it provides the necessary core technical skills and conceptual understanding to delve deeper into these complex fields.

ABOUT COMPUTER PRIDE

computerpride

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+	10,000+	50+
Years of Excellence	Professionals Trained	Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

Location
1st Flr, ICEA Building
Kenyatta Ave, Nairobi

Email
info@computer-pride.co.ke

Phone
+254 705 900 900

www.computer-pride.co.ke