



PYTHON TRAINING

Ai Programming With Python

Develop powerful AI applications using Python. Master machine learning, deep learning, and data science essentials.

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 through hands-on Python programming with Computer Pride's intermediate-level "AI Programming With Python" course. This intensive 2-hour training is meticulously designed for developers and data professionals eager to bridge the gap between foundational Python knowledge and practical AI application. You'll dive into the core concepts of machine learning, understanding how algorithms learn from data to make predictions and decisions. The course emphasizes practical implementation, equipping you with the immediate skills to start building intelligent systems.

Participants will gain proficiency in essential Python libraries such as NumPy and Pandas for data manipulation, and Scikit-learn for implementing various machine learning models. We focus on real-world scenarios, demonstrating how to prepare data, train predictive models, and evaluate their performance. This course is not just about theory; it's about empowering you to write efficient, clean, and effective AI code. By the end, you'll possess a strong grasp of the foundational techniques required to tackle entry-level AI and machine learning projects, significantly enhancing your problem-solving capabilities in a data-driven world.

Joining this program will not only solidify your technical skill set but also open doors to specialized roles within the rapidly expanding field of artificial intelligence. You'll learn to approach complex challenges with an AI-first mindset, positioning yourself as a valuable asset in any tech-forward organization. This certification provides a robust starting point for those looking to specialize further in areas like data science, machine learning engineering, or AI development.

Duration	2 hours
Level	Intermediate
Vendor	Python

COURSE CURRICULUM

01 Module 1: Foundations of AI with Python

- Introduction to Artificial Intelligence and Machine Learning
- Setting up your Python AI Development Environment (Anaconda, Jupyter Notebook)
- Review of Essential Python Concepts for AI (Data Structures, Functions)
- Overview of Key Python Libraries for AI (NumPy, Pandas)

02 Module 2: Data Preprocessing for Machine Learning

- Loading and Inspecting Datasets with Pandas
- Handling Missing Data and Outliers
- Data Transformation Techniques (Scaling, Normalization)
- Feature Engineering Fundamentals

03 Module 3: Applied Supervised Learning Algorithms

- Understanding Supervised Learning: Regression vs. Classification
- Implementing Linear Regression with Scikit-learn
- Model Training, Prediction, and Basic Evaluation Metrics (MSE, R-squared)
- Introduction to Decision Tree Classifiers

04 Module 4: Building and Evaluating Predictive Models

- Implementing a Classification Model (e.g., Decision Tree) with Scikit-learn

- Splitting Data into Training and Testing Sets
- Evaluating Classifier Performance (Accuracy, Confusion Matrix)
- Making Predictions on New Data and Model Deployment Considerations

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Junior AI Developer**
- > **Data Analyst with AI Skills**
- > **Python Developer specializing in Machine Learning Applications**

FREQUENTLY ASKED QUESTIONS

Q: What specific Python libraries and frameworks will I gain hands-on experience with in this course?

This course is designed to give you practical experience with foundational Python libraries critical for AI and Machine Learning. You will gain proficiency in NumPy for numerical operations, Pandas for data manipulation and analysis, and Scikit-learn for implementing a wide range of machine learning algorithms, including regression and classification models.

Q: How does this particular AI Programming with Python course help me kickstart or advance my career in specialized AI or ML roles?

This course provides a robust, practical foundation in AI programming using Python, which is essential for entry-level and intermediate roles. By mastering data preparation, model implementation, and evaluation, you'll be well-prepared to contribute to real-world AI projects, enhancing your resume for positions such as Junior AI Developer, Data Analyst with AI competencies, or a Python Developer looking to specialize in Machine Learning applications.

Q: What prior programming experience or foundational knowledge is expected before enrolling in this 'Intermediate' level AI Programming with Python course?

To get the most out of this intermediate course, it is highly recommended that you have a solid grasp of fundamental Python programming concepts, including variables, data types, control flow (loops, conditionals), and functions. While we will briefly review some essentials, prior hands-on coding experience in Python is crucial, as the course quickly moves into applying these skills to AI concepts.

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.

Location

1st Flr, ICEA Building
Kenyatta Ave, Nairobi

Email

info@computer-pride.co.ke

Phone

+254 705 900 900

www.computer-pride.co.ke