



PYTHON TRAINING

Python Machine Learning Course

Master Python to build, train, and deploy powerful machine learning models for data-driven 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-driven insights with Computer Pride's intensive 2-hour Python Machine Learning Course. This intermediate-level program is meticulously designed to equip professionals and aspiring data scientists with the foundational knowledge and practical skills required to build, evaluate, and deploy machine learning models using Python. You will delve into core ML concepts, mastering essential libraries such as NumPy and Pandas for efficient data manipulation, and Scikit-learn for implementing various algorithms.

This course provides a robust understanding of both supervised and unsupervised learning techniques, focusing on practical application rather than just theory. By the end of this concentrated workshop, participants will be proficient in data preprocessing, feature engineering, basic model training, and performance evaluation. The professional benefits are immense: you'll be able to tackle entry-level predictive modeling challenges, enhance your analytical capabilities, and contribute significantly to data science initiatives within your organization, setting a strong base for more advanced AI and ML studies.

Duration	2 hours
Level	Intermediate
Vendor	Python

COURSE CURRICULUM

01 Module 1: Introduction to Machine Learning & Python Toolkit

- What is Machine Learning? (Brief Overview)
- Key ML Terminology (Features, Labels, Models, Training)
- Setting Up Your Python Environment (Jupyter Notebooks)
- Introduction to NumPy for Numerical Operations
- Introduction to Pandas for Data Manipulation

02 Module 2: Data Preparation & Exploration

- Loading and Inspecting Datasets
- Handling Missing Values (Imputation Strategies)
- Feature Scaling (Standardization, Normalization)
- Encoding Categorical Features (One-Hot Encoding)

03 Module 3: Supervised Learning Fundamentals with Scikit-learn

- Regression: Linear Regression Basic Concept
- Classification: Logistic Regression Basic Concept
- Model Training: Splitting Data, Fitting Models
- Making Predictions

04 Module 4: Model Evaluation & Next Steps

- Key Evaluation Metrics (Accuracy, MSE, R-squared - Brief)
- Concept of Overfitting and Underfitting
- Introduction to Cross-Validation
- Pathways for Further Learning and Project Ideas

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Junior Machine Learning Engineer**
- > **Entry-Level Data Scientist**
- > **Predictive Analytics Specialist**

FREQUENTLY ASKED QUESTIONS

Q: What specific Python proficiency is expected as a prerequisite for this intermediate 2-hour Machine Learning course?

Participants are expected to have a solid understanding of Python fundamentals, including data types, control flow (loops, conditionals), functions, and working with basic data structures like lists, dictionaries, and NumPy arrays. Prior exposure to Pandas is beneficial but not strictly required as it will be covered swiftly within the course.

Q: Given the concise 2-hour format, what practical skills will I realistically gain, and how do they apply to real-world ML problems?

In this intensive course, you will gain hands-on experience with the complete basic ML workflow: loading and preparing data, training fundamental supervised models (regression and classification) using Scikit-learn, and evaluating their performance. While not covering advanced topics, you'll develop a strong practical foundation to understand and begin solving simple predictive problems, preparing you for more complex projects.

Q: Will this course cover deep learning frameworks like TensorFlow or PyTorch, or advanced topics like natural language processing (NLP) or computer vision?

This 2-hour 'Python Machine Learning Course' focuses on core, foundational machine learning concepts and practical application using Scikit-learn for classical algorithms. It does not delve into deep learning frameworks such as TensorFlow or PyTorch, nor does it cover specialized areas like NLP or computer vision. It serves as an essential stepping stone into these more advanced fields.

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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