



SEPTEMBER 16-19, 2025



9 AM - 5 PM



NIBAF, PAKISTAN (KARACHI)



AI & ML CERTIFICATION PROGRAM

MASTERING DATA FOR SMART DECISIONS

This four-day instructor-led, hands-on training provides professionals across industries with the knowledge and practical skills needed to implement Artificial Intelligence (AI) and Machine Learning (ML) models for effective decision making. Participants will explore AI-driven solutions for predictive analytics, risk management, process automation, fraud detection, and enhancing customer experience.

FEE: PKR 60,000 (Excluding tax)



021-35 277 511 | 051-9269850



marketing@nibaf.org.pk | registration@nibaf.gov.pk



0303-065 29 63

AI & ML CERTIFICATION PROGRAM

MASTERING DATA FOR SMART DECISIONS

PROGRAM OBJECTIVE:

- Understand AI, Machine Learning, and Generative AI in the context of different business scenarios.
- Apply AI techniques for data-driven decision-making, risk assessment, and process optimization.
- Use Python for data analysis and visualization across different business functions.
- Build and evaluate machine learning models for industry-specific applications.
- Leverage Generative AI to automate reporting, customer interactions, and content generation.

CONTENTS:

DAY-1: INTRODUCTION TO AI IN BANKING

- Understanding AI and Machine Learning: Exploring their impact on finance and other industries.
- Python for AI & Data Science: Essential programming concepts and hands-on practice.
- Data Handling & Preprocessing: Leveraging Pandas and NumPy for efficient data manipulation and analysis.
- Task Automation with Python: Automating repetitive tasks to enhance efficiency in financial operations.

DAY-2: DATA VISUALIZATION & PREDICTIVE MODELING

- Effective Data Visualization: Creating impactful charts and graphs using Matplotlib, Seaborn, and Plotly.
- Introduction to Machine Learning & Its Types: Understanding supervised, unsupervised, and reinforcement learning.
- Building Predictive Models: Developing machine learning models for forecasting and decision-making.
- Model Evaluation & Performance: Assessing accuracy and reliability using key metrics.
- Ethical & Practical Considerations: Addressing challenges, biases, and best practices in AI implementation.

DAY-3: ADVANCED AI APPLICATIONS

- Time Series Forecasting: Implementing ARIMA and SARIMA models for trend prediction and data-driven decision-making.
- Introduction to Computer Vision: Understanding image processing and real-world applications.
- Teachable Machine for Computer Vision: Building and training AI models with a no-code approach.
- Introduction to Generative AI: Exploring the fundamentals and applications of AI-generated content.

- Exploring Generative AI Tools: Hands-on experience with AI-driven text, image, and data generation.
- Personalized AI Solutions: Leveraging Generative AI for tailored user experiences and automation.

DAY-4: PRACTICAL IMPLEMENTATION

- Capstone Project: Applying concepts to real-world scenarios.
- Hands-on Data Analysis: Working with real-world datasets.
- Developing Solutions: Implementing models for tasks like fraud detection, credit scoring, and financial forecasting.
- Introduction to Streamlit: Building interactive web applications with minimal coding.
- Project Presentations: Showcasing insights, findings, and implemented solutions.

TARGET AUDIENCE:

This program is designed for professionals across industries who seek to leverage Artificial Intelligence and Machine Learning to enhance operational efficiency and decision-making. Ideal participants include business analysts, data scientists, risk managers, IT professionals, operations managers, customer experience specialists, and decision-makers looking to integrate AI-driven solutions into their organizations. Whether in banking, finance, or other sectors, this training also provides valuable insights for those aiming to optimize processes, improve risk assessment, and enhance customer experiences using AI and ML based solutions.

FACILITATOR:

MR. SAJID MAJEED is a highly accomplished AI and data science professional with expertise in Machine Learning, Deep Learning, and Generative AI. As a certified Microsoft Associate Data Scientist and Lead Trainer at NED Academy, he specializes in developing and delivering advanced training programs, fostering AI-driven innovation, and equipping professionals with industry-leading analytical skills.

