

MACHINE LEARNING FOR BANKING AND FINANCIAL DECISION MAKING



OCTOBER 14, 2026



9 AM - 5 PM

**NIBAF, PAKISTAN
(KARACHI)**



COURSE CONTENTS

Module 1: Introduction to AI and Machine Learning in Finance

- Difference between AI, ML and analytics
- Rule-based systems versus Machine Learning models
- Why financial institutions use AI and ML
- Benefits and limitations of Machine Learning

Module 2: Financial Risk Analytics

- Risk indicators in financial data
- Credit-risk signals
- Customer-risk profiling
- Risk scoring
- Low, medium and high-risk classification

Module 3: Fraud Detection Using AI and Machine Learning

- Rule-based fraud detection
- ML-based fraud detection
- Suspicious transaction patterns
- False positives and false negatives

Module 4: Customer Analytics

- Churn prediction
- Customer lifetime value concept
- Product usage analysis
- Complaint trend analysis

Module 5: Understanding Financial Data

- Structured financial data
- Customer profile data
- Transaction data
- Features and target variables
- Data quality
- Data privacy and anonymisation

FACILITATOR

Mr. Sajid Majeed is a dynamic and creative trainer who can provide insights for financial Analytics using Artificial Intelligence Tools, Agentic AI, LLMs, and APIs etc. Skilled in python, data analytics, Artificial Intelligence. Striving to propel forward into the deep sea of Artificial Intelligence.

Module 6: Machine Learning Models for Finance

- Supervised learning
- Unsupervised learning
- Classification
- Regression
- Clustering
- Training data and testing data
- Prediction versus decision

Module 7: Model Evaluation and Responsible Use

- Confusion matrix
- Bias and fairness
- Explainability
- Human-in-the-loop review
- Model monitoring