ARTIFICIAL INTELLIGENCE IN BANKING

USING AI FOR CREDIT DEFAULT PREDICTION, FRAUD DETECTION & SMART CUSTOMER ASSISTANTS

Venue: Southern Sun Hotel, Waterfront – Cape Town, South Africa

International Fee: $2,500 per delegate
Local Fee: K58,000 per delegate

Dates: 19th – 21st November 2025 (Includes extended access to tour & networking)

ABOUT US

Artificial Intelligence (AI) is revolutionizing how financial institutions operate. From advanced fraud detection to intelligent chatbots, AI is creating quantum-leap improvements in banking. This immersive 5-day training course equips banking professionals with the tools, techniques, and hands-on skills to leverage AI for credit default prediction, customer insights, and automated customer service.

Participants will learn how to apply recommender systems, smart assistants, chatbots, classifiers, and predictive engines to real-world banking challenges.

Key focus areas include:

- Data Analysis & Visualization
- Clustering & Customer Segmentation
- AI for Credit Default & Fraud Detection
- Natural Language Processing (NLP)
- Building Smart Assistants & Chatbots

TRAINING
OBJECTIVES

By the end of this course, participants will be able to:

- ✓ Develop predictive models for credit default
- ✓ Design a fraud detection engine
- ✓ Create customer segmentation and recommender systems
- ✓ Build functional chatbots and smart customer assistants
- ✓ Understand and apply Natural Language Processing in banking

TRAINING **METHODOLOGY**

This training uses a combination of interactive lectures, hands-on labs, real-world use cases, and group exercises. Participants will work with industry-standard AI tools, including Python, R, and WEKA. The approach is practical, ensuring attendees leave with applicable skills.

Organisational Impact

Organizations will benefit by:

- Gaining in-house expertise in applying AI to banking problems
- Identifying cost-saving opportunities through automation
- Enhancing fraud detection, customer service, and decision-making
- Gaining insight from real-time data using visualization and NLP tools

Personal Impact

Participants will:

- Develop foundational and applied AI skills
- Gain experience with popular AI platforms (Python, R, WEKA)
- Learn to turn raw banking data into actionable insights
- Acquire chatbot development and NLP techniques
- Build career-ready skills in AI and machine learning

WHO SHOULD ATTEND?

This course is ideal for professionals in the banking and financial services industry, including:

- Risk Managers
- Marketing Professionals
- Computer Scientists / Programmers
- Data Analysts
- Customer Service Managers
- Banking Executives & Department Heads
- AI & Tech Researchers interested in finance

COURSE OUTLINE

Day 1: Artificial Intelligence Basics

- Intro to AI & Machine Learning
- AI in Banking: Use Cases
- Architecture of AI Systems
- Toolkits: Python, R, WEKA

Day 2: Data Analytics & Visualization

- Data Gathering Techniques
- Feature Engineering & Cleaning
- Statistical Analysis
- Visual Analytics & Dashboards
- Dimensionality Reduction

Day 3: Machine Learning

- Supervised vs. Unsupervised Learning
- Clustering & Association Rules
- Recommender Systems
- Decision Trees, KNN, Naïve Bayes
- Neural Networks in Banking

Day 4: Natural Language Processing (NLP)

- Data Gathering Techniques
- Feature Engineering & Cleaning
- Text Mining from Banking Documents
- Word Features, Semantics & Classification
- Information Extraction & QA Systems
- Regex & NLP in Sentiment Analysis
- Visual Analytics & Dashboards
- Dimensionality Reduction

DAY 5: CHATBOT DEVELOPMENT

- Conversational Data Analysis
- NLP Engines: Understanding & Generation
- Chatbot Design Architecture
- AI Search Integration
- Build and Deploy a Banking Chatbot

FOR REGISTRATION & ENQUIRIES:

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