

AI Integration in Business Analysis & Process Engineering for Financial Services

Duration: 7 Days (56 Hours)

Day 1: AI Foundations, Business Analysis & Process Discovery

Module 1: AI Foundations for Business Analysis

- Evolution of AI in Banking and Financial Services
- AI vs Automation vs Machine Learning vs Generative AI
- Business Analyst's Role in AI Projects
- AI Use Cases across Banking Operations
- AI Adoption Lifecycle and Transformation Roadmap
- AI Opportunity Identification and Prioritization
- AI Use-Case Feasibility Assessment
- Business Value vs Technical Feasibility
- Traditional Analytics vs AI-Driven Decision Support
- Challenges and Opportunities of AI Integration

Hands-on Lab: Identify and prioritize AI opportunities in a traditional banking process.

Module 2: AI-Driven Business Process Discovery

- Business Process Management (BPM) Fundamentals
- AI-Assisted Process Discovery and Process Mapping
- Process Hierarchy, Decomposition and Stakeholders
- BPMN Concepts for AI-Enabled Processes
- Process Mining Fundamentals and Process Variants
- Bottleneck and Inefficiency Identification
- As-Is vs To-Be Process Design
- AI-Assisted Process Documentation

Hands-on Lab: Redesign a customer onboarding process using AI recommendations.

Day 2: AI-Assisted Requirements & Business Documentation

Module 3: Requirement Engineering with AI

- AI-Assisted Requirement Gathering and Elicitation
- Functional vs Non-Functional Requirements
- AI for Requirement Classification and Prioritization
- AI-Generated User Stories and Acceptance Criteria
- Requirement Validation and Quality Assessment
- Ambiguity and Inconsistency Detection
- AI-Assisted Requirement Traceability
- Stakeholder Interview Preparation
- Change Impact Analysis

Hands-on Lab: Generate and validate a BRD requirements set, user stories and acceptance criteria using Generative AI.

Module 4: AI for Business Documentation

- AI-Generated BRD and FRD
- AI-Assisted Process Documentation
- Requirement Summarization and Meeting Minutes
- Business-Rule Extraction
- Document Comparison and Change Detection
- Decision-Log and Report Generation
- AI-Assisted Documentation Review
- Document Versioning and Quality Assurance

Hands-on Lab: Generate and review complete BA documentation using AI.

Day 3: Intelligent Process Improvement & AI Automation

Module 5: Intelligent Process Improvement

- AI-Assisted Gap Analysis and Root Cause Analysis
- Process Optimization and Workflow Optimization
- AI Recommendations for Process Improvement
- Process Performance Metrics and KPI Design
- Cycle-Time and Efficiency Analysis
- Predictive Process Analytics

- Anomaly and Exception Identification
- Process Simulation and Optimization Concepts
- Continuous Improvement using AI

Hands-on Lab: Improve a Loan Approval Process using AI-based analysis and recommendations.

Module 6: AI Automation in Financial Services

- Intelligent Document Processing and OCR
- Document Classification and Extraction
- AI Chatbots and Virtual Assistants
- AI-Powered Customer Service
- Intelligent Workflow Automation and Orchestration
- Human-in-the-Loop Processes
- Exception Handling and Escalation
- Straight-Through Processing
- AI-Assisted Case Management
- Automation Opportunity Assessment

Hands-on Lab: Design an AI-enabled banking workflow with automation, exception handling and human oversight.

Day 4: Generative AI, Prompt Engineering & Decision Support

Module 7: Generative AI for Business Analysts

- Prompt Engineering Fundamentals
- Prompt Structure and Design Patterns
- System, User and Task Instructions
- Zero-Shot, Few-Shot and Role-Based Prompting
- Context Engineering for Business Analysis
- Role, Context and Constraint-Based Prompting
- Structured Outputs and Schema-Based Responses
- Reusable Prompt Templates and BA Prompt Library
- Prompt Testing, Evaluation and Optimization
- Hallucination Detection and Output Validation

Hands-on Lab: Build and evaluate a reusable prompt library for common BA activities.

Module 8: AI-Assisted Data & Decision Analysis

- AI-Assisted Data Interpretation
- Natural-Language Analysis of Business Data
- AI-Generated Summaries and Business Insights
- Trend and Anomaly Identification
- Scenario Analysis using Generative AI
- Decision-Support Scenarios
- Business Rules and Policy Interpretation
- AI-Assisted Executive Reporting
- Human Validation of AI-Generated Insights

Hands-on Lab: Analyze a financial-services dataset and produce a validated decision-support report.

Day 5: Intelligent Workflows, Agentic AI & Process Orchestration

Module 9: AI-Powered Workflow Design

- From Process Discovery to Intelligent Automation
- Automation Readiness Assessment
- Rule-Based vs AI-Based Automation
- Workflow Orchestration Patterns
- Event-Driven Business Workflows
- Exception and Escalation Management
- Human-in-the-Loop Design Patterns
- AI-Assisted Case Routing
- AI-Powered Classification and Prioritization
- Operational Controls for Intelligent Workflows

Hands-on Lab: Transform an existing financial-services process into an intelligent workflow.

Module 10: Agentic AI & Intelligent Business Processes

- Introduction to AI Agents and Agentic AI Concepts
- Agent Architecture, Tools and Tool Use
- Planning and Task Decomposition
- Agent Memory and Context Management
- Workflow Agents vs Autonomous Agents
- Multi-Agent Collaboration Patterns
- Human-Agent Collaboration

- AI-Driven Decision Support and Process Orchestration
- Agent Guardrails and Human Approval
- Agent Evaluation and Monitoring

Hands-on Lab: Design a multi-agent business workflow with human approval and guardrails.

Day 6: Enterprise AI Knowledge, RAG & Responsible AI

Module 11: Retrieval-Augmented Generation for Business Analysis

- Limitations of Standalone LLMs
- RAG Architecture and Workflow
- Enterprise Knowledge Bases
- Document Ingestion and Preprocessing
- Document Loaders and Content Preparation
- Chunking Strategies
- Embeddings and Semantic Search
- Vector Databases and Similarity Search
- Metadata Filtering
- Grounded Responses and Citations
- RAG for Policies, SOPs and Process Documentation

Hands-on Lab: Build a knowledge assistant for financial-services policies and procedures.

Module 12: Advanced Retrieval, RAG Evaluation & AI Risk

- Hybrid Keyword and Vector Retrieval
- Query Rewriting and Multi-Query Retrieval
- Retrieval Filtering and Context Relevance
- Answer Faithfulness and RAG Evaluation Metrics
- RAG Testing and Quality Assurance
- Knowledge Access Boundaries
- Source Attribution and Traceability
- AI Governance Fundamentals and Responsible AI
- AI Risk Identification and Assessment
- Bias, Fairness and Explainable AI
- Human Oversight, Privacy and Auditability
- AI Compliance Considerations in Financial Services

Hands-on Lab: Evaluate a RAG assistant and create an AI risk and control matrix for a banking use case.

Day 7: AI Adoption, Transformation & End-to-End Process Engineering

Module 13: AI Readiness, Change & Business Value

- AI Governance Operating Models
- AI Readiness Assessment and Capability Maturity
- Stakeholder Management and AI Requirement Workshops
- AI Adoption Strategy and Change Management
- AI Training and Adoption Planning
- AI Project Lifecycle and Delivery Risks
- Benefits Realization
- Measuring AI Business Value
- Business KPIs and AI Success Metrics
- AI Transformation Roadmap
- AI Controls, Approval Checkpoints and Incident Escalation

Hands-on Lab: Create an AI readiness assessment, business-value framework and adoption roadmap.

Module 14: End-to-End AI Transformation

- AI Opportunity Identification and Feasibility
- As-Is Process Discovery and To-Be Process Design
- Requirement Engineering, BRD/FRD and User Stories
- Intelligent Automation and Workflow Design
- Generative AI and Prompt Workflow Integration
- Enterprise Knowledge and RAG
- Governance, Risk and Responsible AI Controls
- Human-in-the-Loop and Agentic Process Orchestration
- Business Value Measurement and KPI Tracking
- AI Adoption Roadmap and Stakeholder Presentation

Hands-on Lab: Develop and present an end-to-end AI-enabled financial-services process transformation.