

Business Analyst with AI Product Development Program Overview

The Business Analyst with AI Product Development program is designed to prepare students for the next generation of Business Analyst and AI Product roles. The curriculum combines traditional Business Analysis practices with modern AI-powered workflows, enabling learners to gather business requirements, analyze business problems, create professional documentation, collaborate with Agile teams, and leverage AI tools to build smarter digital products.

Module 1 – Introduction to Business Analysis

Topics Covered:

- Introduction to Business Analysis
- Business Analyst Roles & Responsibilities
- Business Analyst Career Roadmap
- SDLC & Product Development Lifecycle
- Types of Business Analysts
- Business Domains
- BA vs Product Manager vs Project Manager
- Understanding Business Problems
- Root Cause Analysis
- Problem Statement Creation
- SWOT Analysis
- SMART Goals
- Business Case Preparation

Module 2 – Requirement Engineering & Documentation

Topics Covered:

- Requirement Gathering Techniques
- Stakeholder Interviews
- Brainstorming Workshops
- Observation Techniques
- Surveys & Questionnaires
- Functional Requirements
- Non-Functional Requirements
- Business Requirements
- Technical Requirements
- Requirement Prioritization (MoSCoW)
- Requirement Traceability Matrix (RTM)
- Version Control
- Business Requirement Document (BRD)
- Functional Specification Document (FSD)
- Software Requirement Specification (SRS)
- Functional Requirement Document (FRD)

Module 3 – Stakeholder Management & Business Communication

Topics Covered:

- Stakeholder Identification
- Stakeholder Mapping
- RACI Matrix
- Power-Interest Grid
- Communication Planning
- Requirement Elicitation
- Conflict Resolution
- Meeting Documentation
- MOM Preparation
- Presentation Skills
- Executive Reporting

Module 4 – Business Process Modelling

Topics Covered:

- Business Process Mapping
- BPMN 2.0
- Swimlane Diagrams
- As-Is Process
- To-Be Process
- Use Case Diagrams
- Activity Diagrams
- Workflow Modelling
- Process Optimization
- Gap Analysis

Module 5 – Agile Business Analysis

Topics Covered:

- Agile Fundamentals
- Scrum Framework
- Sprint Planning
- Sprint Review
- Sprint Retrospective
- Product Backlog
- Sprint Backlog
- User Stories
- Acceptance Criteria
- INVEST Principle
- Story Points
- Backlog Grooming
- Agile Documentation

Module 6 – Business Analysis Tools

Topics Covered:

- Agile Fundamentals
- Scrum Framework
- Sprint Planning
- Sprint Review
- Sprint Retrospective
- Product Backlog
- Sprint Backlog
- User Stories
- Acceptance Criteria
- INVEST Principle
- Story Points
- Backlog Grooming
- Agile Documentation

Module 7 – AI for Business Analysts

Topics Covered:

- Introduction to Artificial Intelligence
- Machine Learning Basics
- Generative AI
- Large Language Models (LLMs)
- Prompt Engineering
- AI-Assisted Requirement Gathering
- AI for User Story Generation
- AI for BRD Preparation
- AI Documentation Automation
- AI Meeting Summarization
- AI Research Techniques
- AI Productivity Tools
- Responsible AI
- AI Ethics
- Data Privacy & Governance

Module 8 – AI Product Development

Topics Covered:

- Introduction to AI Products
- AI Product Lifecycle
- Product Discovery
- Market Research
- Product Vision
- Product Strategy
- Product Roadmap
- Minimum Viable Product (MVP)
- Feature Prioritization
- Product Requirement Document (PRD)
- AI Feature Design
- AI Acceptance Criteria
- AI Product Metrics
- Product Launch Strategy

Module 9 – Product Design & Wireframing

Topics Covered:

- UI/UX Fundamentals
- User Journey Mapping
- Customer Persona
- Product Flow
- Information Architecture
- Low-Fidelity Wireframes
- High-Fidelity Wireframes
- Figma Basics
- Wireframe Review
- Prototype Validation

Module 10 – Testing, Validation & Deployment

Topics Covered:

- User Acceptance Testing (UAT)
- Test Planning
- Test Scenarios
- Test Cases
- Bug Reporting
- Defect Lifecycle
- Change Management
- Deployment Readiness
- Product Validation
- Business Sign-off

Module 11 – Career Development

Topics Covered:

- Resume Building
- LinkedIn Optimization
- Portfolio Development
- Mock Interviews
- BA Interview Questions
- HR Interview Preparation
- Client Communication
- Professional Documentation
- Industry Certifications
- Career Roadmap

INDUSTRY PROJECTS

Project 1 – E-Commerce Order Management System

Objective:

Develop complete business analysis documentation for an e-commerce order management platform.

Deliverables:-

- Business Requirement Document (BRD)
- Functional Requirement Document (FRD)
- Stakeholder Register
- BPMN Process Flow
- User Stories
- Acceptance Criteria
- Requirement Traceability Matrix (RTM)

Project 2 – Healthcare Appointment & Patient Management System

Objective:

Digitize a healthcare appointment and patient management process while documenting the entire business workflow.

Deliverables:-

- BRD
- FSD
- SRS
- Gap Analysis
- Process Flow Diagrams
- Wireframes
- UAT Test Cases
- Change Impact Analysis

Project 3 – AI-Powered Student Career Guidance Platform

Objective:

Build the complete business and product requirements for an AI-driven career guidance platform.

Deliverables:-

- Product Requirement Document (PRD)
- AI Functional Requirements
- Product Roadmap
- User Stories
- Wireframes
- AI Acceptance Criteria
- Sprint Backlog

Project 4 – AI Customer Support & CRM Automation Platform

Objective:

Design a business solution for an AI-powered customer support and CRM automation platform.

Deliverables:-

- Business Requirement Document
- Product Vision Document
- AI Requirement Specification
- Process Flow Diagrams
- Product Roadmap
- CRM Dashboard Requirements
- Wireframes
- Executive Presentation

Learning Outcomes:

Upon successful completion of this program, learners will be able to:

- Understand the Business Analyst lifecycle
- Gather and analyze business requirements
- Prepare professional BA documentation (BRD, FRD, FSD, SRS)
- Create User Stories and Acceptance Criteria
- Perform Stakeholder Analysis
- Build Business Process Models (BPMN)
- Conduct Gap Analysis
- Work with Agile & Scrum methodologies
- Manage projects using Jira & Confluence
- Utilize AI tools to accelerate Business Analysis activities
- Understand AI Product Development Lifecycle
- Build AI Product Requirement Documents (PRDs)
- Create Product Roadmaps & MVP Planning
- Design Wireframes and Product Workflows
- Perform UAT Planning & Execution
- Present complete business solutions to stakeholders