# Course Name: Business Analytics

# **Duration: 12 Months**

# Term 1: Foundation of Business Analytics

#### **Module 1: Introduction to Business Analytics**

- 1. Analytics as a Strategy Lever
- 2. Organizational Analytics Readiness
- 3. Analytics Lifecycle
- 4. Tools Used by Analytics Teams

## **Module 2: Data Analytics Fundamentals for Managers**

- 1. Exploring Data Through Descriptive Statistics
- 2. Principles of Data Visualization
- 3. Designing Impactful Dashboards & Reports
- 4. Crafting Compelling Narratives with Visual Data

#### **Module 3: Descriptive Analytics**

- 1. Hypothesis Testing & Confidence Intervals
- 2. Introduction to Regression Analysis
- 3. Understanding Correlation & Causation
- 4. Applying Analytical Techniques in Business Scenarios

#### **Module 4: Inferential Statistics for Decision Making**

- 1. Managing Data Storage Systems in Business
- 2. Data Quality & Integrity in Business Processes
- 3. Implementing Data Governance & Compliance
- 4. Utilizing Data Modeling for Business Intelligence

# Term 2: Data Management & SQL for Business Insights

#### **Module 5: SQL Fundamentals for Business Analysis**

- 1. Introduction to SQL for Business Decision Making
- 2. Using SQL to Generate Business Reports
- 3. Data Aggregation & Analysis with SQL
- 4. SQL for Financial & Operational Monitoring

#### **Module 6: Data Querying Fundamentals**

- 1. Data Retrieval Techniques for Managers
- 2. SQL for Managing Business Operations
- 3. Database Management & Maintenance for Business Leaders
- 4. Leveraging SQL for Strategic Decision Support

#### **Module 7: Advanced SQL for Managers**

- 1. Advanced SQL Functions for Business Analysis
- 2. Optimizing Database Performance
- 3. Deploying Data Warehousing Solutions with SQL
- 4. Advanced Data Security & Compliance in SQL

#### **Module 8: Extracting Business Insights from Data**

- 1. Strategic Business Analysis with Excel
- 2. Data Cleaning & Preparation for Intelligence Extraction
- 3. Descriptive Statistics for Informed Decision-Making
- 4. Visualizing Data for Actionable Business Insights

# Term 3: Business Decision Data Modeling

#### Module 9: Decision Making Techniques Using Excel

- 1. Business Analysis with Excel Functions
- 2. Financial Decision-Making with Excel
- 3. Advanced Excel Techniques for Strategic Business Analysis
- 4. Strategic Data Highlighting with Conditional Formatting

#### **Module 10: Business Reporting with Excel Pivot Tables**

- 1. Deriving Insights through Customized Pivot Tables
- 2. Enhancing Efficiency with Advanced Pivot Table Features
- 3. Harnessing Data Analysis Using Pivot Tables
- 4. Streamlining Reporting Processes with Automated Pivot Tables

#### **Module 11: Excel Modelling for Business Solutions**

- 1. Excel Modelling Basics for Business Leaders
- 2. High-Impact Financial Models for Success
- 3. Excel Models for Business Optimization
- 4. Data Information Retrieval for Business Efficiency

#### Module 12: Data Visualization & Storytelling Basics

- 1. Data-Driven Decision Making with Power BI
- 2. Streamlining Data Management & Quality
- 3. Optimized Data Structure for Analysis

## Term 4: Data Visualization & Story Telling

#### Module 13: Advanced Power BI for Strategic Business Insights

- 1. Utilizing DAX Functions for Tailored Insights
- 2. Refined Data Exploration for Deeper Insights
- 3. Enhanced Strategic Planning & Scenario Evaluation
- 4. Predictive Analytics for Informed Decision-Making

## Module 14: Real-Time Insights & Data Integrity for Managers

- 1. Deploying Reports to Power BI Service
- 2. Monitoring in Real-Time with Dashboards & Tiles
- 3. Ensuring Data Accuracy & Concurrency
- 4. Enhanced Data Security & Compliance

# **Module 15: Building Reports for Business Insights**

- 1. Utilizing Reports for Presentation & Insight
- 2. Exploration & Analysis with Views & Slicers
- 3. Data Interpretation with Conditional & Field Formatting
- 4. Harnessing Natural Language Queries with "Ask a Question"

# **Term 5: Applied Managerial Analytics**

#### **Module 16: Business Analytics in BFSI**

- 1. Risk Analytics in BFSI
- 2. Fraud Analytics in BFSI
- 3. Modeling Credit Risks (Take Home Case)
- 4. Case Study: Real World Application

#### Module 17: Analytics for Marketing & Telecommunications

- 1. Marketing Terminologies: Review
- 2. Analyzing Customer Behavior & Marketing Strategies
- 3. Customer Lifetime Value (CLV) Analysis in Telecom
- 4. Case Study: Telecom Analytics Implementation

#### Module 18: Analytics in Healthcare & Manufacturing

- 1. Utilizing Real-Time Analytics in Healthcare
- 2. Predictive Modeling for Disease Diagnosis
- 3. Demand Forecasting in Manufacturing
- 4. Case Study: Healthcare Analytics Implementation

# **Term 6: Advanced Business Analytics**

#### Module 19: E-commerce & Supply Chain Analytics

- 1. Pricing and Profitability Analytics
- 2. Basket Analysis and Cross-Selling
- 3. Managing Demand Variability
- 4. Case Study: E-commerce Analytics

#### **Module 20: HR Analytics**

- 1. Introduction to HR Analytics
- 2. Basics of People Analytics
- 3. Identifying Cause-and-Effect Variables
- 4. Application of AI and ML Tools in HR Functions

#### **Case Studies Overview**

- **GROW360**: Use of artificial intelligence to screen human intelligence.
- Apturja Power Limited: Implementation of HR Analytics.
- **Lowe's**: Connecting people investments and business outcomes using value linkage.
- **Verizon Communications**: Implementing a Human Resources Balanced Scorecard.

# **Final Thoughts**

Ensuring you gain practical insights and knowledge to drive successful business decisions through analytics. ```

This curriculum has been crafted and formatted as requested, ready for direct use.