Course Title: BUSINESS ANALYTICS FOUNDATION (BAF)

Course Code: BA1010

Duration: 5 Days

Target Audience: Aspiring data professionals, business managers, analysts, decision-makers, fresh graduates

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Course Objective:

To equip participants with a solid understanding of fundamental business analytics concepts, techniques, and tools to support data-driven decision-making. The course emphasizes real-world applications, exploratory data analysis, visualization, and basic predictive modeling.

Course Outcomes:

Upon successful completion, participants will be able to:

1. Understand core principles and scope of business analytics.

2. Apply descriptive, diagnostic, and basic predictive analytics techniques.

3. Interpret data patterns and generate meaningful insights using visual tools.

4. Utilize spreadsheet tools (Excel/Google Sheets) and beginner-friendly software (like Power BI or Tableau) for analysis.

5. Make data-driven business decisions and present findings effectively.

Course Outline – 5 Days

Day 1: Introduction to Business Analytics & Data Concepts

Topics:

- What is Business Analytics?

- Types of Analytics: Descriptive, Diagnostic, Predictive, Prescriptive

- Role of Analytics in Business Decision-Making

- Data Life Cycle and Quality

- Introduction to Data Types and Sources (Structured vs Unstructured)

- Overview of Analytics Tools (Excel, Power BI, Tableau)

Activity:
Case study discussion: How companies use data for competitive advantage

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Day 2: Descriptive Analytics Using Excel / Google Sheets

Topics:

- Data Cleaning and Preparation

- Descriptive Statistics: Mean, Median, Mode, Range, Standard Deviation

- Data Visualization: Charts, Graphs, Pivot Tables

- Business Dashboards and Reports

Activity:
Hands-on session: Creating a dashboard from sample sales data

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Day 3: Diagnostic Analysis & Data Visualization Tools

Topics:

- Correlation and Trend Analysis

- Root Cause Analysis Techniques

- Introduction to Data Visualization Tools (Power BI or Tableau)

- Best Practices in Dashboard Design

- Business KPI Development

Activity:
Project: Build an interactive sales performance dashboard

Day 4: Introduction to Predictive Analytics & Models

Topics:

- Basics of Predictive Modeling

- Introduction to Regression Analysis

- Forecasting Techniques

- Using Tools for Simple Prediction (Excel Solver / Power BI Forecast)

Activity:
Forecasting demand using historical data

Day 5: Data-Driven Decision Making & Capstone Project

Topics:

- Communicating Analytical Insights

- Decision-Making Frameworks (SWOT, ROI, What-if Analysis)

- Ethical Use of Data

- Final Group Project Presentation

- Course Review and Q&A

Capstone Project:
Teams present a mini-project analyzing a dataset to solve a business problem (e.g., improving customer retention, optimizing sales, reducing cost)

Assessment:

- Daily quizzes (10%)

- Practical assignments (40%)

- Capstone project and presentation (50%)

Course Objektif:

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Target audience:

Malaysian citizen who have been retrenched or are seeking new job opportunities.

Course outline:

Part 1: Introduction to Business Analytics & Data Concepts

Part 2: Descriptive Analytics Using Excel / Google Sheets

Part 3: Diagnostic Analysis & Data Visualization Tools

Part 4: Introduction to Predictive Analytics & Models

Part 5: Data-Driven Decision Making & Capstone Project

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