Course Code: FMSVAC106

Course Title:Power BI

**Total Hours: 35** 

### **Course Outcomes:**

• Proficiency in Power BI for business intelligence and decision-making

Ability to design and interpret data visualizations for business applications

• Hands-on experience with real-world data through a capstone project

This course will equip MBA students with the necessary skills to leverage Power BI in a wide range of business contexts.

About the Course: A value-added course on Power BI for MBA students can be designed to enhance their analytical and decision-making skills. The course would cover core concepts of data analysis, visualization, and business intelligence using Power BI, with a focus on practical applications in business scenarios.

## **Syllabus**

Unit-1

7 Hours

## Module 1: Introduction to Business Intelligence (BI)

- · Overview of BI and its importance for MBA students
- Key components of Business Intelligence
- Introduction to Power BI: What is Power BI and why is it used in business?

## Module 2: Data Analytics and Visualization Concepts

- Data analytics for business: Types of data (structured, unstructured, semi-structured)
- Data visualization principles: Understanding graphs, charts, and dashboards
- Use cases of BI in business (marketing, finance, operations, HR)

Unit-2

7 Hours

### Module 3: Getting Started with Power BI

- Power BI environment: Interface, dashboards, and navigation
- Importing data from various sources (Excel, SQL, Cloud Services)
- Data transformations: Cleaning and shaping data in Power BI

## Module 4: Building Reports and Dashboards

- Creating and managing reports: Filters, Slicers, and Interactions
- Designing effective dashboards for business insights
- Best practices for creating visually appealing and interactive reports

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Unit-3 7 Hours

# Module 5: Advanced Data Modelling and DAX (Data Analysis Expressions)

- Introduction to data modeling and relationships in Power BI
- Basics of DAX: Calculated columns, measures, and functions
- Advanced DAX: Time intelligence functions, financial calculations

## Module 6: Power BI for Business Applications

- Financial analytics: Budget vs actual analysis, profitability tracking
- Marketing analytics: Customer segmentation, campaign effectiveness
- Operations analytics: Supply chain performance, inventory management

Unit-4 7 Hours

## Module 7: Sharing and Collaborating with Power BI

- Publishing reports and sharing dashboards
- Power BI service vs Power BI desktop
- Power BI in the cloud: Collaborating and sharing insights with teams

#### Module 8: Power BI and Advanced Features

- Power BI with Excel: Integrating Excel for data analysis
- Power BI and AI: Leveraging AI features for predictive analysis
- Automating reports and refreshing data with Power BI

Unit-5 7 Hours

### Module 9: Case Studies and Capstone Project

- Real-world case studies: Power BI in different industries
- Capstone project: Solving a business problem using Power BI, presenting findings, and making data-driven recommendations

## Module 10: Power BI Certification and Career Opportunities

- Preparing for Power BI certification
- Career paths in business analytics and BI for MBA graduates
- Power BI as a strategic tool for business decision-makingthe student's professional profile.

Faculty of Management Studies

Gopal Narayan Singh University

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Coordinator

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