MBPC1008 BUSINESS ANALYTICS (3-0-0)

Course Objectives:
1. Provide foundational knowledge of business analytics concepts (descriptive, predictive, and prescriptive) and their application to business decision-making.
2. Develop skills in data management and visualization using tools like R programming and exploratory data analysis (EDA).
3. Introduce advanced predictive analytics techniques, including regression, classification, and time-series forecasting.
4. Highlight real-world business analytics applications in marketing, finance, and supply chain management.

Module-I
Introduction to Business Analytics and its importance, Types of Analytics- Descriptive, Predictive, Prescriptive, Business Analytics Framework and Applications,Data Management and Governance-Data Collection, Cleaning, Integration and Data Warehousing and ETL Processes,Data-Driven Business Models

Module-II
Introduction R Programming, Descriptive Analytics Techniques- Exploratory Data Analysis (EDA),Descriptive Statistical Techniques (e.g., mean, median, mode),Data Visualization and Reporting,Predictive Analytics Techniques-Regression Analysis, Classification Models,Time-Series Forecasting, Clustering.

Module—III
Big Data Analytics Framework and Technologies, Industry Application- Marketing Analytics, Financial Analytics, Supply Chain Analytics,Customer Segmentation, Churn Analysis, and Risk Management,Real-World Case Studies in Business Analytics

Course Outcomes:
The course aims to help students:

CO-1: Apply business analytics techniques to solve practical problems.

CO-2: Use tools like R programming to analyze and visualize data.

CO-3: Understand predictive analysis methods such as regression and classification.

CO-4: Gain skills in marketing, finance, and supply chain analytics.

CO-5: Analyze big data to improve strategic decision-making.

Text Books
- Prasad, R.N., & Acharya, S. (2011), Fundamentals Of Business Analytics. John Wiley & Sons.
- Kumar, U.D. (2017). Business Analytics: The Science of Data-driven Decision Making.Wiley India.
- JuliantPallant – "SPSS Survival: A step by step guide to data analysis using IBM SPSS" – McGraw Hill Education.
- Daniel G. Murray - "Tableau Your Data!: Fast and Easy Visual Analysis with Tableau Software" - 2ndEdition