COURSE TITLE	**BUSINESS ANALYTICS**
COURSE CODE	**04BB0412**
COURSE CREDITS	**4**

Course Outcomes: After completion of this course, student will be able to:

1 Apply foundational concepts of business analytics to make data-driven decisions.
2 Differentiate between types of digital data and recognize their business applications.
3 Apply tools and techniques of BI and statistical analysis for interpreting data.
4 Analyze industry and functional use-cases using analytics tools and dashboards
5 Evaluate ethical, legal, and future trends of analytics in business contexts.

Pre-requisite of course: None

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
4	0	0	50	30	20	0	0

Contents : Unit	Topics	Contact Hours
1	**Foundations of Business Analytics** Introduction to Business Analytics, Role of Analytics in Decision Making, Analytics Lifecycle and Capability Building Roadmap Types of Analytics: Descriptive, Diagnostic, Predictive, Prescriptive, Big Data and Modern Data Architectures, Key Tools & Platforms Overview (Excel, Power BI, Tableau, Python)	12
2	**Types and Sources of Digital Data** Structured, Semi-Structured, and Unstructured Data, ources: Internal, External, Web, Social Media, Sensor Data, Data Quality, Cleansing, and Transformation, Data Warehousing and ETL Concepts, Metadata and Data Cataloguing, Introduction to SQL for Business Queries	12
3	**Business Intelligence and Data Analysis Techniques** Business Intelligence Concepts and Value, Dashboards and Data Visualization (Power BI/Tableau), OLAP and Reporting, Statistical Analysis: Correlation, Regression, Exploratory Data Analysis and Interpretation, Real-time Analytics and Stream Processing Basics	12
4	**Applications of Business Analytics** Functional Areas: HR, Marketing, Operations, Finance, Industry Use Cases: Retail, Healthcare, BFSI, E-commerce, Logistics; Emerging Trends: IoT Analytics, Location-Based Analytics; Generative AI in Business (ChatGPT, Copilot), Social Media & Web Analytics; Analytics in Startups and MSMEs	12

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Contents : Unit	Topics	Contact Hours
5	**Ethics, Governance and Future of Analytics** Ethical Use of Data and Bias in Algorithms, Privacy Laws: GDPR, India DPDP Act, Data Localization, Responsible AI and Explain ability, Role of Citizen Data Scientists, Career Roles: Analyst, Data Scientist, Data Engineer, Future Trends: Augmented Analytics, AutoML, Embedded AI	12
Total Hours		**60**

Textbook :

1 Business Analytics: The Science of Data-Driven Decision Making, U Dinesh Kumar, Wiley, 2020

References:

1 Fundamentals of Business Analytics, Fundamentals of Business Analytics, R.N. Prasad & Seema Acharya, Wiley, 2011

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
Remember / Knowledge	**Understand**	**Apply**	**Analyze**	**Evaluate**	**Higher order Thinking / Creative**
0.00	0.00	35.00	35.00	30.00	0.00

Instructional Method:

1 theory

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