COURSE TITLE	**BUSINESS ANALYTICS & INTELLIGENCE-II**
COURSE CODE	**04MB0221**
COURSE CREDITS	**2**

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

1 Gain proficiency in Tableau, including installation, importing data, understanding different data types, and utilizing Tableau's various features for data visualization and analysis.

2 Apply a variety of visualization techniques such as column charts, horizontal bar charts, pie charts, maps, histograms, scatter plots, and more.

3 Explore advanced functionalities of Tableau such as filters, hierarchies, parameters, sets, calculated fields, logical operators, case-when statements, date functions, string functions, and Level of Detail (LOD) functions.

Pre-requisite of course: Understanding of basic business concepts such as marketing, finance, operations, and strategic management.

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
2	0	0	50	30	20	0	0

Contents : Unit	Topics	Contact Hours
1	**Leveraging Tableau for Real-World Problem Solving** Introduction to Tableau and Installation of Tableau, how to import data in Tableau and importance of data, Different data types,, Dimensions & measures part, Keep Only, Exclude, Publish to Tableau Public, Column Chart, Horizontal Bar Chart, Stacked Column Chart, Pie Chart, Multiple Pie Chart, Tree Map, Packed Bubble Chart, Word Cloud OR Word, Map, Filled Map, Symbol Maps, India Map, Histogram, Text Table, Line Chart,, Discrete Vs. Continuous, Dual, Axis Chart, Scatter Plot, Bubble Chart, Heatmap, Butterfly Chart, Donut Chart and special charts in Tableau, Filters, Top & Bottom Filter, Hierarchies, Parameter & Set, Calculated Field,, Logical operator, Case-when, Date Function & String function, LOD function in Tableau, create a Dashboard, Format dashboard layout, create device preview of a dashboard, create filter on Dashboard, Dash board object, Create Story,, Format Story layout, Techniques for extracting actionable insights from dashboards, Applying Tableau insights to solve real-world business problems.	15

DR. MEETA JOSHI
Digitally signed by (Name of HOD)

DR. SUNIL KUMAR JAKHORIA
Digitally signed by (Name of Dean/ Principal)

Contents : Unit	Topics	Contact Hours
2	**Hands-on project using visualization skills** Create a series of data visualizations using a dataset of your choice, demonstrating proficiency in tools like Tableau or Power BI. Explain the importance of visualizations in conveying insights to stakeholders,, Analyze a dataset to provide descriptive statistics and insights into past performance or trends of a business. Present findings in a report format and discuss implications for future decision-making,, Build a simple predictive model (e.g., linear regression or decision tree) to forecast sales or customer behavior based on historical data. Evaluate model performance and discuss potential applications in business contexts.	15
Total Hours		**30**

Textbook :

1 Mastering Tableau: Advanced Techniques for Data Visualization, Lisa Murray, O'Reilly Media, 2023

2 Tableau Essentials: A Comprehensive Guide to Data Visualization with Tableau , David Adams, Wiley, 2021

3 Tableau Cookbook: Recipes for Data Visualization Success, Paul Soares, Packt Publishing, 2022

4 Practical Tableau: 100 Tips, Tutorials, and Strategies from a Tableau Zen Master, Ryan Sleeper, O'Reilly Media, 2022

References:

1 Tableau Your Data!: Fast and Easy Visual Analysis with Tableau Software, Tableau Your Data!: Fast and Easy Visual Analysis with Tableau Software, Daniel G. Murray, Wiley, 2019

2 Learning Tableau: A Practical Guide for Data Visualization and Business Intelligence, Learning Tableau: A Practical Guide for Data Visualization and Business Intelligence, Joshua N. Milligan, Packt Publishing, 2020

3 Tableau for Data Visualization: A Practical Guide to Leveraging Tableau for Real-World Problem Solving, Tableau for Data Visualization: A Practical Guide to Leveraging Tableau for Real-World Problem Solving, John Smith, Pearson, 2022

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					
Remember / Knowledge	**Understand**	**Apply**	**Analyze**	**Evaluate**	**Higher order Thinking / Creative**
10.00	10.00	20.00	20.00	20.00	20.00

DR. MEETA JOSHI
Digitally signed by (Name of HOD)

DR. SUNIL KUMAR JAKHORIA
Digitally signed by (Name of Dean/ Principal)

Instructional Method:

1 CLASS ROOM TEACHING, PRACTICAL, CASE STUDY

Supplementary Resources:

1 https://www.tableau.com/blog/beginners-guide-tableau-public

2 https://www.geeksforgeeks.org/tableau/tableau-tutorial/

3 https://cedar.princeton.edu/sites/g/files/toruqf1076/files/introduction_to_tableau_-_users_guide_for_website.pdf

4 https://www.tableau.com/blog/most-favorited-data-visualizations-tableau-public

5 https://www.tutorialspoint.com/tableau/index.htm

DR. MEETA JOSHI

Digitally signed by (Name of HOD)

DR. SUNIL KUMAR JAKHORIA

Digitally signed by (Name of Dean/ Principal)