

COURSE TITLE	DECISION ANALYTICS
COURSE CODE	04GB0308
COURSE CREDITS	2

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

- 1 Demonstrate an understanding of key concepts and techniques in decision analytics, articulating their significance in the decision-making process.
- 2 Will apply statistical tools and data visualization techniques to analyze business data and generate insights for informed decision-making.
- 3 Critically analyze predictive models and optimization techniques to evaluate their effectiveness in addressing real-world business challenges.
- 4 Create data-driven solutions and recommendations for business problems using decision analytics frameworks and tools.

Pre-requisite of course:NA

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	Introduction to Decision Analytics Overview of Decision Analytics, Types of Decision Analytics, Data Collection and Preparation, Statistical Tools for Decision Making	15
2	Analytical Techniques and Applications Data Visualization, Predictive Modeling Techniques, Optimization Techniques, Decision Trees, Risk Analysis	15
Total Hours		30

Textbook :

- 1 Business Analytics: The Science of Data-Driven Decision Making, A. R. G. Dey, Wiley India 2023, 2023
- 2 Data Science for Business: What You Need to Know About Data Mining and Data-Analytic Thinking, Foster Provost and Tom Fawcett, Wiley, 2022

References:

- 1 Business Analytics: Data Analysis and Decision Making, Business Analytics: Data Analysis and Decision Making, S. Christian Albright and Wayne L. Winston, Cengage Learning, 2022

References:

- 2 Analytics for Managers: With Excel, Analytics for Managers: With Excel, Peter C. Bell, Wiley, 2023

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
20.00	30.00	25.00	15.00	10.00	0.00

Instructional Method:

- 1 Case Based Learning, Project Based Learning, Flipped Classroom, Collaborative Learning