



Bapatla Engineering College :: Bapatla

(Autonomous)

DATA WAREHOUSING & DATA MINING Department Elective-I III B.Tech – V Semester (Code: 18CSD12)			
Lectures :	4 Periods / Week	Continuous Internal Assessment :	50 Marks
Final Exam :	3 hours	Semester End Exam :	50 Marks
UNIT-I			15 Periods
Data Mining: Introduction, Kinds of Data, Data Mining Functionalities, Classification of Data Mining Systems, Major Issues in Data Mining Data Pre-processing: Importance of Data Process, Data Cleaning, Data Integration and Transformation, Data Reduction, Data Discretization and Concept Hierarchy Generation			
UNIT-II			15 Periods
Data Warehouse and OLAP Technology: Introduction, A Multidimensional Data Model, Data Warehouse Architecture, Data Warehouse Implementation, Data Warehouse Implementation, From Data Warehousing to Data Mining. Data Cube Computation and Data Generalization: Efficient Methods for Data Cube Computation, Further Development of Data Cube and OLAP Technology, Attribute-Oriented Induction—An Alternative Method for Data Generalization and Concept Description			
UNIT-III			15 Periods
Mining Frequent Patterns, Associations, and Correlations: Basic Concepts and a Road Map, Efficient and Scalable Frequent Item-set Mining Methods, Mining Various Kinds of Association Rules, From Association Mining to Correlation Analysis, Constraint-Based Association Mining			
UNIT-IV			15 Periods
Cluster Analysis: Introduction, Types of Data in Cluster Analysis, A Categorization of Major Clustering Methods, Partitioning Methods- k-Means and k-Medoids, Hierarchical Methods- Agglomerative and Divisive Hierarchical Clustering, Density-Based Methods- DBSCAN, Grid-Based Methods- STING, Outlier Analysis.			
Text Book(s) :	1. Jiawei Han Micheline Kamber – “Data Mining Concepts & Techniques”, 2 nd ed., Morgan Kaufmann Publishers		
References :	1. “Data Warehousing in the real world – A Practical guide for Building decision support systems”, Sam Anahory, Dennis Murray, Pearson Education. 2. “Data Mining (Introductory and Advanced Topics)”, Margaret H. Dunham, Pearson Education.		