



## RCETCSAC01 - Data Mining

### Course outcomes:

- To fully understand standard data mining methods and techniques such as association rules, data clustering and classification.
- Learn new, advanced techniques for emerging applications (e.g. social network analysis, stream data mining).

### Syllabus:

#### UNIT 1

##### Data Mining Introduction

Data Mining Techniques- Process with a typical collection of data, Big Data, and data visualization using data mining software- Data Mining Methods as Tools - Data Mining Memory, Based Reasoning Methods, Algorithms with simulated data based on real-world applications

#### UNIT II

##### Data Mining Types and Methods

Data Stream Mining, Time Series Mining, Text Mining, Data Stream Clustering, and Big Data Mining are all terms for the same thing- Market Basket Analysis - Fuzzy Data Mining, Fuzzy Decision Tree,

#### UNIT III

##### Data Mining Applications

Applications of the Fuzzy Association Rule, Support Vector Machines, Genetic Algorithms, Rough Sets - Graph Mining, Social Network Mining, Web Mining, Web Usage Mining, Privacy-Preserving Data Mining, and Recommender Systems are examples of social computing.

### Reference Text Books

1. Han, J., Kamber, M., & Pei, J. (2011). Data mining: Concepts and techniques (3rd ed.). Waltham: Morgan Kaufmann.