

## SYLLABUS COPY

### DS3210PE : DATA PREPARATION AND ANALYSIS

III-II:CSE(DS)								
Course Code	Category	Hours/Weak			Credits	Max Marks		
DS3210PE	Professional Elective	L	T	P	C	CIE	SEE	Total
		3	0	0	3	25	75	100
Contact Classes:45	Tutorial classes:15	Practical classes: Nil			Total Classes:60			
Prerequisites: None								

#### OBJECTIVES:

- To learn to gather data
- To understand different cleaning methods of data

#### OUTCOMES:

- Student will able to prepare different data formats
- Able to analyze data

#### Unit I

Data Gathering and Preparation: Data formats, parsing and transformation, Scalability and real-time issues

#### Unit II

Data Cleaning: Consistency checking, Heterogeneous and missing data, Data Transformation and segmentation

#### Unit III

Exploratory Analysis: Descriptive and comparative statistics, Clustering and association, Hypothesis generation

#### Unit IV

Visualization: Designing visualizations, Time series, Geo located data, Correlations and connections, Hierarchies and networks, interactivity

#### Unit V

Visualizations using R

#### Textbook:

1. Glenn J. Myatt, Making sense of Data: A practical Guide to Exploratory Data Analysis and Data Mining, John Wiley Publishers, 2007.