SRI VENKATESWARA UNIVERSITY : TIRUPATI
Courses Offered for All Groups
LIFE SKILLS COURSES
w.e.f. AY 2024-25 (SEMESTER-III)
SKILLCOURSE
DATA ANALYTICS

Credits: 2   2 hrs/week

Learning Outcomes:

Upon successful completion of the course, the students will be able to

- Understand the framework of big data environment.

- Apply pre-processing techniques that aid in feature selection.

- Classify the data for better understanding.

UNIT - I: 8hrs

Introduction: Overview, Data Science, Big Data Characteristics, Architecture – Core Layers, service layers; roles in data science team, life cycle of data-centric projects, big data life cycle.

UNIT-II: 10hrs

Pre-processing: Introduction, Measures of Central tendency-Mean, Median, Mode, sampling distributions, inferential statistics, ANOVA, feature selection-PCA.

UNIT-III: 12hrs

Methods: Association rules, Apriori algorithm, overview of clustering, k-means algorithm, Regression- Linear, Logistic, Support Vector Machines, Classification- Decision Tree classification, Attribute selection, Naïve Bayes Classification.

Text Books:

1. G. Sudha Sadasivam, R. Thirumahal, "Big Data Analytics", Oxford University Press.

Reference Books:

1. Paul Zikopoulos, Chris Eaton, "Understanding Big Data Analytics for Enterprise Class Hadoop and Streaming Data", 1st edition, TMH.

Activities Planned:

1. Identify the roles played by different persons in the team.
2. Understand the phases of big data life cycle.
3. Calculate the central tendency for a given data.
4. Apply Apriori algorithm for generating association rules on a given data.
5. Construct decision tree on a given data for classification.

Format of Model Question Paper
SKILL COURSE
Semester-wise Syllabus under CBCS
(w.e.f. 2023-24 Admitted Batch)
SEMESTER - III
DATE ANALYSIS

Time: 1½ hrs   **Max. Marks 50**

Section A
Answer any Five of the following   **5 X 10 = 50 M**

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.