

21DS4L1

P.B.SIDDHARTHA COLLEGE OF ARTS & SCIENCE (AUTONOMOUS), VIJAYAWADA-520010

(An Autonomous College in the Jurisdiction of Krishna University, A.P., India.)

DATA VISUALIZATION LAB

SYLLABUS W.E.F 2021-2022

Course Category: Programme Core **Course Type:** Practical **Credits:** 3 **Semester:** IV

Prerequisites: Excel, Tableau **Lecture-Tutorial-Practice:** 0-0-6

Continuous Evaluation: 30 **Semester end Evaluation:** 70 **Total Marks:** 100

Course Objectives:

1. To implement *Tableau Installation, Introduction, Exploring*.
2. To implement *Data Blending*.
3. To implement *Uni-variate Charts, Bi-variate Charts, Multi-variate Charts*.
4. To implement *Trend Line, Word cloud, Bubble Chart*.
5. To implement creating a Simple Dash Board, Creating Maps, Creating a Dash Board, Creating a Story and Data Munging, Importing Graphs, Group and Aggregate Data, Create a Dash Board in Power BI.

Course Outcomes:

Upon successful completion of the course, the student will be able to:

CO1: Implement tableau *Installation, Introduction, Exploring*.

CO2: Implement *Data Blending*.

CO3: Implement *Uni-variate Charts, Bi-variate Charts, Multi-variate Charts*.

CO4: Implement *Trend Line, Word Cloud, Bubble Chart*.

CO5: To implement creating a *Simple Dash Board, Creating Maps, Creating a Dash Board, Creating a Story* and Data Munging, Importing Graphs, Group and Aggregate Data, Create a *Dash Board* in Power BI.

1. Tableau installation. (CO1,L1)
2. Tableau Introduction / Exploring Tableau. (CO1,L1)
3. Data Blending. (CO2,L3)
4. Creating Univariate charts
 - a.Bar Chart. (CO3,L3)
 - b.Pie Chart. (CO3,L3)
 - c. Line Charts
 - d. Box plots
5. Dual Axis Chart. (CO3,L3)
6. Shared Axis. (CO3,L3)
7. Creating Bivariate Charts
 - a. Cross Tab. (CO3,L3)
 - b. Scatter Plot. (CO3,L3)
 - c. Trend Line. (CO3,L3)
8. Creating Multi-variate Charts
 - a. Dual Axis Chart. (CO3,L3)

- b. Area charts(CO3,L3)
- 9. Word Cloud. (CO4,L3)
- 10. Bubble Chart. (CO4,L3)
- 11. Creating a Simple Dash Board. (CO5,L3)
- 12. Creating Maps. (CO5, L3)
- 13. Creating a Dash Board. (CO5, L3)
- 14. Creating a Story. (CO5, L3)

Power BI:

- 15. Data Munging in Power BI. (CO5, L3)
- 16. Importing Graphs in to power BI. (CO5, L3)
- 17. Group and Aggregate Data in Power BI. (CO5, L3)
- 18. Create a *Dash Board* in *Power BI*. (CO5, L3)

Note: The list of experiments is not limited to the above list. If the existing laboratory experiments completed in advance, the additional laboratory programs can added , and to be executed in the laboratory.