

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 be added, and to be executed in the laboratory.