**Data Analysis and Visualisation Using Python (Code (Credit): CUTM 1018(0-1-3))**

Course Syllabus

**Module-I**

STORY BOARD DEVELOPMENT

The objective and flow of the story to be understood through cases

**Module-II**

DATA READING USING PYTHON FUNCTIONS

Python libraries: Pandas, NumPy, Plotly, Matplotlib, Seaborn, Dash

Data collection from online data sources, Web scrap, data formats such as HTML, CSV, MS Excel, data compilation, arranging and reading data, data munging

**Module-III**

DATA VISUALSATION USING PYTHON LIBRARIES

Different graphs such as Scatterplot, Line chart, Histogram, Bar chart, Bubble chart, Heatmaps etc.

Dashboard Basics – Layout, Reporting, Infographics, Interactive components, live updating

**Projects List**

1. World Development Indicators

2. IPL matches

3.  IBM HR Analytics

4. State wise Analysis Socio Economic Indicators

5. Analysis of Lawn Tennis Tournaments

6. World Cup

7. FIFA cup

8. Status of Micro Small Medium Enterprises in India

9. Crime Against Women

10. Tourism in India

11. Loan/Credit Analysis

12. Indian Budget Analysis

13. Handlooms in India

14. Crimes in India

15. E-commerce

16. NIRF Results

17. Results Analysis of CUTM students (last five year passed out students)

18. Malnutrition

19. Population

20. Performance of Indian Movies

21. Crop Production in India

22. Sales in Super Markets

**Project-2**

23. ERP dashboarding

24. Details of Social/ Empowerment schemes of Govt. etc.

25. COVID 19

**References:**

<https://www.programmer-books.com/wp-content/uploads/2019/04/Python-for-Data-Analysis-2nd-Edition.pdf>

<https://towardsdatascience.com/data-visualization/home>

Reading materials and videos available on internet on how to use ANACONDA, JUPYTER NOTEBOOK and Python Libraries