ACADEMY OF DIGITAL ARTS

D-214, New Delite Building, Borivali Shopping Centre, Next to Rajmahal Hotel, Chandavarkar Road, Borivali-W, Mumbai – 400092

Advanced Python Programming- Introduction to Data Science

Sr No.	Content	Hours
1	**Introduction to Python Data Science** - Variable and Conditional Flow Control	1
2	**Introduction to CSV**- CSVs in Python, Fixing Data Types, Problems in Data, Missing Records, Refining Data, Problems	1
3	**Reading from Different Formats** **Data Cleaning and Imputation**- Working with Errors, Missing Values, Filtering, Sorting and Descriptive Statistics	2
4	**Numpy, Pandas 1D Data**- Numpy Arrays, Vectorized Operations, Multiplying by Scalar, Standardizing Data, Numpy Index Arrays, in-Place vs Not In-Place, Pandas, Series Indexes, Pandas Vectorized Operations, Pandas Series Indexes, Filling Missing Values, Series apply(), Plotting	3
5	**Numpy, Pandas 2D Data**- Numpy 2-D Array,Numpy Axis, Accessing DataFrames, Loading Data in DataFrame, Correlation, Pandas Axis, Dataframe Vectorised Operations, applymap(), apply(),Adding Df to Series, Standardizing Each column, Gropby(), Combining DF, Plotting DF	3
6	**Data Visualisation ith MatplotLib and Seaborn** Graphs- Histogram, Scatter Plot, Line Graph, Bar Plot, Box Plot, Subplot, Overlapping Graphs	2
7	**Exploratory Data Analysis**	2
8	**Data Analysis and Related Terms- Linear Regression**	2
9	**Singular Value Decomposition of Matrix, Least-Square Regression**	2
10	Project: Recommendation System	2
Total		20