LIVEWIRE
FOR LIVE CAREERS

Data Science and Data Engineering using python- Day wise Syllabus

Day	Topics 4hours/day
1	Introduction to Data Science, Importance of Python programming
2	Basics of Python, Basic of statistic using Python, Modules and packages in python
3	Exploratory Data Analysis (EDA), case study
4	Data Visualization, Skewness, Kurtosis, Probability Theory, case study
5	Normal Distribution, Z-score, Confidence Interval, Z-distribution, case study
6	T-distribution, Data Pre-processing, case study
7	Introduction to Machine learning, Importance of Machine learning in Data Science. Supervised learning Algorithm: Naïve Bayes, case study
8	Supervised learning Algorithm: Random Forest, case study, Linear Regression, case study
9	Unsupervised learning: K-means clustering, Hierarchal clustering and dendrogram, case study
10	Introduction to NLP , Data analysis using text mining, Text mining using NLP
11	Text mining case study, Introduction to WordCloud, Applications of wordcloud, case study
12	Time Series Analysis, Forecasting, case study
13	Dimension Reduction, Association Rule Mining, case study
14	Introduction to Data Engineering, Difference between Data Science and Data Engineer, Different data sources, Procedure of data collection from different data sources, Introduction to MYSQL
15	Basics of database, Configuring MYSQL server and client, Steps for database creation, Database maintenance, Basics and advance database queries
16	Python programming for SQL, Integrating data engineering with data science.