# Data Science Master Class-2023

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# Description:

A Data Science Masterclass is an intensive and comprehensive training program designed to equip individuals with the knowledge, skills, and tools necessary to become a successful data scientist. It covers various topics such as statistics, machine learning, data visualization, programming, and data manipulation techniques. The program typically involves a hands-on approach with real-world projects and case studies, providing participants with practical experience and industry-relevant skills. By the end of the masterclass, individuals will have a deep understanding of the data science process, be able to handle and analyze large datasets, and develop predictive models that can be applied in various fields.

# What you will learn:

- Essential Python concepts for data science, including data types, variables, loops, and functions
- How to work with data using Python's powerful data manipulation libraries, such as NumPy and Pandas
- How to visualize data using Python libraries such as Matplotlib and Seaborn
- Machine learning with Python: Supervised and Unsupervised learning
- Techniques and best practices for effective data analysis and data storytelling

# Keynote about this course

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| Comprehensive training | Hands-on experience |
| 7 core concepts | Industry-relevant skills |
| 10 +projects | Downloadable ppt and source code |
| Live interaction | Expert instructors |
| Certificate upon completion | |

# Agenda

**Python for Data Science:**

**Day 1: Introduction of data science**

**Day 2: Basic python programming- Part I**

**Day 3: Python programming– Part II**

# Libraries for Data science

**Day 4: Python for data analytics- Pandas**

**Day 5: Python for data analytics- NumPy**

**Day 6: Python for data analytics- Matplotlib**

**Day 7: Python for data analytics- Seaborn**

# Data science element

**Day 8: Data Collection, Data Wrangling, and Data Cleaning Techniques**

**Day 9: Exploratory Data Analysis (EDA) and Data Visualization Techniques**

**Day 10: Probability and Statistics for Data Science**

# Machine learning , Data processing and feature engineering

**Day 11: Introduction to Machine Learning and Types of Learning**

**Day 12: Preprocessing Data for Machine Learning**

**Day 13: Feature Selection and Feature Engineering Techniques**

**Day 15: Handling Missing Data and Outliers**

**Day 16: Encoding Categorical Variables and Scaling Numerical Variables**

**Day 17: supervised learning regression and classification - model**

**Day 18: unsupervised learning clustering- model**

## Tools for visualization

**Day 19: Introduction Tableau – data visualization**

**Day 20: Tableau – Data Sources, Worksheet**

**Day 21: Introduction power BI**

**Day 22: Visualize Data in the Form of Various Charts, Plots, and Maps BI tools - Power BI**

## Data science Project

**Day 23: Credit score classification**

**Day 24: Stress prediction**

**Day 25: Social Media Ads Classification**

**Day 26: electricity price prediction**

**Day 27: Ground water level prediction**

**Day 28: churn analysis prediction**

**Day 29: drowsiness detection by using CNN**

**Day 30: chat bot**