Course Description: Join our Professional Data Analytics course training in Dubai, available both in-person and online. Learn the essential skills and techniques to perform data analysis, data visualization, predictive modelling, and more using leading analytics tools. Whether you're an absolute beginner or an experienced professional seeking to upskill, our intensive program sets you up for success in your chosen field. Get hands-on experience and become proficient in this high-demand domain.

DATA ANALYTICS

Module 1: Introduction to Data Analytics

- The data analytics process (collect, store, analyze, interpret, visualize)
- Types of data and data sources
- Popular tools for data analytics (Excel, SQL, Python, R, Tableau, Power BI etc.)

Module 2: Data Collection and Storage

- Structured vs unstructured data
- Database management systems
- SQL for managing relational databases
- NoSQL for non-relational databases
- Data warehousing

Module 3: Data Cleaning and Preparation

- Dealing with missing/null values
- Data transformations and normalization
- Feature engineering
- Data sampling techniques

Module 4: Exploratory Data Analysis (EDA)

- Descriptive statistics of numerical data
- Visualizing categorical and numerical variables
- Distribution analysis, outliers detection
- Correlation analysis

Module 5: Introduction to Statistics for Data Science

- Probability distributions
- Statistical inference
- Hypothesis testing

- Bayesian statistics

Module 6: Predictive Modeling

- Linear regression
- Logistic regression
- Decision trees
- Clustering algorithms

Module 7: Advanced Modeling Techniques

- Neural networks
- Dimensionality reduction techniques
- Ensemble methods
- Recommendation engines

Module 8: Model Evaluation and Tuning

- Overfitting and underfitting issues
- Performance metrics for different problems
- Hyperparameter tuning
- Model selection

Module 9: Data Visualization

- Chart types (bar, line, scatter, map etc.)
- Dashboard design principles
- Interactive visualizations
- Visualization tools (Tableau, Power BI etc.)