

HDTC Training Center Provide

Technical proposal of the Training program **Data Analytics for Management**



Course Overview:

This comprehensive course equips participants with the essential skills to harness the power of data analytics and drive informed decision-making within organizations. Through a blend of theoretical concepts and practical applications, participants will learn to collect, clean, analyze, and interpret data using various statistical and analytical techniques.

Program Objectives:

By the end of this program, participants will be able to:

- Understand the importance of data analytics in today's business environment.
- Collect and clean data from various sources.
- Apply statistical techniques to analyze and interpret data.
- Use data visualization tools to create meaningful insights.
- Develop data-driven decision-making strategies.
- Identify and address ethical considerations in data analytics

Program Outlines:

Module 1: Introduction to Data Analytics

- The role of data analytics in business intelligence
- Data types and sources
- Data quality and cleaning techniques
- Data visualization tools and techniques

Module 2: Descriptive Statistics

- Measures of central tendency (mean, median, mode)
- Measures of dispersion (variance, standard deviation)
- Data distribution (normal distribution, skewness, kurtosis)
- Data visualization using charts and graphs

Module 3: Inferential Statistics

- Hypothesis testing
- Confidence intervals
- Correlation and regression analysis
- ANOVA (analysis of variance)

Module 4: Data Mining Techniques

- Association rule mining
- Clustering analysis

- Classification algorithms
- Time series analysis

Module 5: Data Visualization and Storytelling

- Principles of effective data visualization
- Choosing the right chart or graph
- Creating compelling data stories
- Using storytelling techniques to communicate insights

Module 6: Big Data Analytics

- Introduction to big data
- Big data technologies (Hadoop, Spark, NoSQL databases)
- Big data analytics tools and techniques
- Ethical considerations in big data analytics

Module 7: Data-Driven Decision Making

- The decision-making process
- Using data to inform strategic decisions
- Data-driven innovation
- Ethical considerations in decision-making
- Course Delivery Methods
- Lectures and presentations
- Hands-on exercises using data analytics tools
- Case studies and discussions

Targeted Audience :

- All interested employees

Training methods:

- Technology-Based Learning.
- Simulation in Training.
- On-the-job guidance.
- Trainer-Led Training.
- Work Teams and Roles.
- Films and Videos.
- Case Studies and Workshops.