

BIG DATA PRINCIPLES AND PRACTICES

"Collect, Analyze, and Leverage Big Data to Drive Insights and Business Growth."

Schedule

Venue (InHouse)	Fees
At Your Organization Premises	Ask For The Quotation

► **Available delivery methods:** In-House Training

Introduction

Big Data is transforming industries by enabling organizations to harness massive volumes of data to extract actionable insights. The ability to collect, store, process, and analyze large datasets is crucial for informed decision-making, operational efficiency, and strategic growth.

The Big Data Principles and Practices Training course provides participants with practical knowledge of Big Data concepts, tools, and technologies. Through hands-on exercises and real-world case studies, participants will learn how to work with structured and unstructured data, utilize modern Big Data platforms, and apply analytical techniques to generate meaningful insights for business and technology applications.

Objectives

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

- Understand the core concepts and evolution of Big Data.
- Explore different types of data – structured, semi-structured, and unstructured.
- Learn Big Data storage and processing techniques using platforms like Hadoop and Spark.
- Apply data preprocessing, cleansing, and transformation methods.
- Perform data analysis and visualization to generate actionable insights.
- Understand data governance, security, and privacy principles.
- Implement Big Data solutions for real-world business problems.
- Optimize data pipelines and processes for efficiency and scalability.

Why Attend

Big Data skills are in high demand across industries, including finance, healthcare, retail, and technology. This course provides participants with the knowledge and hands-on experience needed to manage large datasets, analyze trends, and support data-driven decision-making. Whether you are a beginner or a professional seeking to upgrade your skills, this training prepares you to leverage Big Data for business and operational excellence.

Target Audience

This course is suitable for:

- Data Analysts and Data Scientists
- IT Professionals and Software Developers
- Business Analysts and Decision-Makers
- Engineers and Technology Enthusiasts
- Students and Graduates seeking Big Data expertise
- Professionals involved in data-driven projects

Individual Benefits

- Gain practical knowledge of Big Data tools, platforms, and techniques.
- Learn to preprocess, analyze, and visualize large datasets.
- Enhance problem-solving and analytical skills for data-driven decision-making.
- Increase employability and professional value in Big Data and analytics roles.
- Develop confidence in implementing data-driven solutions for real-world challenges.
- Acquire foundational knowledge to progress to advanced AI and machine learning applications.

Organizational Benefits

- Improve business decision-making through data-driven insights.
- Enhance operational efficiency and optimize resource allocation.
- Support innovation and strategic planning with accurate data analysis.
- Build in-house expertise in Big Data analytics and management.
- Ensure compliance with data governance and privacy standards.
- Foster a culture of analytics and informed decision-making across teams.

Instructional Methodology

The training employs a practical, project-based approach through:

- Interactive lectures on Big Data principles and technologies
- Hands-on exercises using Big Data platforms (Hadoop, Spark, etc.)
- Real-world case studies of Big Data applications across industries
- Step-by-step tutorials for data preprocessing, analysis, and visualization
- Group projects and collaborative exercises for practical problem-solving
- Assignments focused on implementing Big Data solutions
- Continuous feedback and Q&A sessions for individual improvement

Course Outline

- Module 1: Introduction to Big Data – Concepts, Characteristics, and Applications
- Module 2: Types of Data – Structured, Semi-Structured, and Unstructured
- Module 3: Big Data Storage and Processing – Hadoop Ecosystem, Spark, and Data Lakes
- Module 4: Data Preprocessing – Cleaning, Transformation, and Integration
- Module 5: Big Data Analytics – Descriptive, Predictive, and Prescriptive Techniques
- Module 6: Data Visualization and Business Intelligence Tools
- Module 7: Big Data Governance, Privacy, and Security
- Module 8: Real-World Applications – Case Studies from Industry
- Module 9: Optimization of Data Pipelines and Processes
- Module 10: Capstone Project – Implementing a Big Data Solution for a Real-World Problem

Certification

Upon successful completion, participants will receive a Certificate in Big Data Principles and Practices, recognizing their ability to manage, analyze, and leverage large datasets to generate insights and support business and technological decision-making.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

In-House / Customized Training

Interested in running this course for your team?

Please contact us:

TEL:

+601116373203

EMAIL:

info@mawaevents.net

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.