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# MASTERCLASS WORKSHOP ON DIGITIZATION AND BIG DATA ANALYTICS

Start Date:	04/01/2026	End Date:	08/01/2026
Categories:	Artificial Intelligence & Er	Venues:	Dubai
Formats:	In Person	Instructors:	

#### **OVERVIEW**

This MasterClass workshop provides an in-depth exploration of digitization strategies and the transformative power of Big Data Analytics, equipping participants with the knowledge and skills to leverage data-driven insights for competitive advantage.

# **OBJECTIVES**

By the end of this course, participants will be able to: – Understand the core principles and strategic imperatives of digital transformation. – Identify key Big Data technologies and architectures, including Hadoop and Spark. – Develop skills in data preprocessing, exploration, and visualization using tools like Python (Pandas, Matplotlib) and R. – Apply machine learning algorithms for predictive modeling and pattern recognition. – Evaluate ethical considerations and governance frameworks for Big Data. – Formulate data-driven strategies to enhance business decision-making and operational efficiency.

#### **COURSE OUTLINE**

1- Foundations of Digital Transformation and Data Strategy 2- Big Data Technologies and Infrastructure 3- Data Analytics Techniques and Machine Learning 4- Data Visualization and Storytelling 5- Implementing Data-Driven Decision Making

#### TARGET AUDIENCE

Mid to senior-level managers, data analysts, IT professionals, business strategists, and decisionmakers seeking to understand and implement digitization and Big Data analytics within their organizations.

#### **METHODOLOGY**

A blend of expert-led lectures, interactive case studies, hands-on exercises with industry-standard tools (e.g., Python, R, SQL), group discussions, and real-world scenario analysis.

#### CONCLUSION

Participants will leave with a comprehensive understanding of how to drive digital transformation through effective Big Data analytics, enabling them to make more informed, data-backed strategic decisions and foster innovation within their organizations.

#### **DAILY AGENDA**

## Day 1: Digital Transformation Landscape

Explore the strategic drivers of digitization, understand the evolving digital ecosystem, and learn to identify opportunities for digital innovation.

## Day 2: Big Data Architecture & Tools

Dive into the foundational technologies of Big Data, including distributed systems like Hadoop and Spark, and understand data warehousing and lake concepts.

## Day 3: Cleaning, transforming, and exploring datasets

Gain practical skills in cleaning, transforming, and exploring datasets using Python libraries (Pandas) and SQL, preparing data for analysis.

## Day 4: Predictive Modeling & Machine Learning

Learn to apply supervised and unsupervised machine learning algorithms for forecasting, classification, and clustering, using R and Python.

#### Day 5: Data Visualization & Strategic Implementation

Master data visualization techniques with tools like Tableau or Power BI and develop frameworks for implementing data-driven strategies and measuring impact.

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For more information, please contact us:

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