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# AI POWERED DATA ANALYTICS

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| **Start Date:** | 11/01/2027 | **End Date:** | 15/01/2027 |
| **Categories:** | Artificial Intelligence & En | **Venues:** | Barcelona |
| **Formats:** | In Person | **Instructors:** | |

## OVERVIEW

This course provides a comprehensive exploration of how Artificial Intelligence (AI) is revolutionizing data analytics. Participants will learn to leverage AI tools and techniques to extract deeper insights, automate complex analytical processes, and drive data-informed decision-making across various business functions.

## OBJECTIVES

By the end of this course, participants will be able to: – Understand the foundational concepts of AI and machine learning as applied to data analytics. – Identify and apply key AI algorithms for predictive modeling, anomaly detection, and natural language processing in data. – Gain hands-on experience with popular AI-powered analytics platforms and libraries. – Develop strategies for integrating AI into existing data analytics workflows and infrastructure. – Evaluate the ethical considerations and potential biases in AI-driven data analysis. – Interpret and communicate AI-generated insights effectively to stakeholders.

## COURSE OUTLINE

1- AI Fundamentals for Data Analytics 2- Machine Learning Algorithms in Practice 3- AI-Powered Data Visualization and Interpretation 4- Implementing AI Analytics Solutions 5- Ethics and Future Trends in AI Data Analytics

## TARGET AUDIENCE

Data analysts, business intelligence professionals, data scientists, IT managers, and business leaders seeking to enhance their data analytics capabilities with AI.

## METHODOLOGY

A blend of lectures, case studies, hands-on labs using Python libraries (e.g., Scikit-learn, TensorFlow, PyTorch) and cloud-based AI analytics platforms, group discussions, and project-based learning.

## CONCLUSION

Upon completion, participants will be equipped to harness the power of AI for advanced data analysis, leading to more accurate predictions, automated insights, and strategic business advantages.

## DAILY AGENDA

### Day 1: AI and Data Foundations

Explore the intersection of AI and data analytics, covering core concepts like machine learning, deep learning, and their relevance to data processing and insight generation.

### Day 2: Supervised and Unsupervised Learning

Dive into practical applications of supervised learning (regression, classification) and unsupervised learning (clustering, dimensionality reduction) using AI algorithms on real-world datasets.

### Day 3: Investigate natural language processing (NLP)

Investigate natural language processing (NLP) for text analytics, anomaly detection for fraud identification, and time-series forecasting using AI models.

### Day 4: AI Analytics Platforms and Deployment

Gain practical experience with AI-powered analytics tools and cloud platforms, focusing on model deployment, MLOps principles, and performance monitoring.

### Day 5: Responsible AI and Future Outlook

Address ethical considerations, bias detection, explainable AI (XAI), and discuss emerging trends and future applications of AI in data analytics.

*For more information, please contact us:*
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