

Introduction to Artificial Intelligence

5 - 9 May 2024 Amman (Jordan) ibis Amman



# Introduction to Artificial Intelligence

REF: W1588 DATE: 5 - 9 May 2024 Venue: Amman (Jordan) - ibis Amman Fee: 3900 Euro

## Introduction:

The Introduction to Artificial Intelligence training program provides a fundamental understanding of AI concepts and applications. Participants explore AI's history, current capabilities, and potential impact across industries. Through theoretical learning and practical exercises, individuals establish a foundational knowledge base for further exploration in AI.

# **Program Objectives:**

#### At the end of this program the participants will be able to:

- Understand the foundational concepts of Artificial Intelligence.
- Explore the diverse applications of AI in business and industry.
- Develop proficiency in core mathematical concepts and programming languages relevant to AI.
- Gain practical skills and knowledge to embark on further exploration and application of AI technologies.

## **Targeted Audience:**

- Professionals seeking to enhance their understanding of AI concepts and applications.
- Business leaders and decision-makers looking to leverage AI for strategic advantage.

# **Program Outlines:**

Unit 1:

Introduction to Artificial Intelligence:

- Course Introduction.
- Introduction.

## Unit 2:

## **Decoding Artificial Intelligence:**

• Decoding Artificial Intelligence and its meaning, scope, and stages.



- Exploring the three stages of Artificial Intelligence and its applications.
- Investigating applications like image recognition and examples of AI's impact across industries.
- Analyzing the effects of Artificial Intelligence on society, including its role in telemedicine and solving complex social problems.
- Understanding the benefits AI offers multiple industries and 11 key takeaways.
- Concluding with a knowledge check to reinforce learning and comprehension.

#### Unit 3:

## Fundamentals of Machine Learning and Deep Learning:

- Exploring the meaning of Machine Learning and its relationship with Statistical Analysis
- Understanding the process and types of Machine Learning, including Unsupervised and Semi-supervised Learning
- Delving into Machine Learning algorithms such as Regression, Naive Bayes, and Deep Learning
- Defining concepts like Artificial Neural Networks, Perceptron, and Online vs. Batch Learning
- Highlighting key algorithms and their applications in Machine Learning
- Concluding with key takeaways and a knowledge check to reinforce understanding.

## Unit 4:

## Machine Learning Workflow:

- Learning Objective: Understand the Machine Learning Workflow.
- Acquire more data and formulate sharp questions for analysis.
- Add and assess data quality in the dataset.
- Transform features and extract meaningful insights to answer questions.
- Utilize the obtained answers effectively and reinforce learning with key takeaways and a knowledge check.

## Unit 5:

#### Performance Metrics:

- Understanding the need for Performance Metrics and key methods employed.
- Exploring the components of a Confusion Matrix with an example.



- Identifying terms associated with the Confusion Matrix and strategies to minimize false cases.
- Examining metrics like Accuracy, Precision, Recall Sensitivity, Specificity, and F1 Score.
- Concluding with key takeaways and a knowledge check to reinforce understanding.