

## Who we are?

Techeduxon has been a platform for global online technology education since 2015. We are now taking it up a notch higher by introducing ways of advanced learning to up-skill and cross-skill your profession with cutting-edge, customized programs. With our Top Tier IT & Enterprise training Courses, We enable you to the forefront & become 'Industry Ready' in this Advancing & Unforeseen Digital World with your up skill Innovations.

## Artificial Intelligence Course Overview

- **Introduction to AI:** Understanding the basics of AI, its history, and current applications.
- **Machine Learning (ML):** Supervised, unsupervised, and reinforcement learning, including popular algorithms like regression, decision trees, and clustering.
- **Deep Learning:** Neural networks, convolutional neural networks (CNNs), and recurrent neural networks (RNNs) for tasks like image and speech recognition.
- **Natural Language Processing (NLP):** Text analysis, sentiment analysis, and chatbots using NLP techniques.
- **AI Tools and Frameworks:** Working with TensorFlow, Keras, and other AI development tools.
- **AI Ethics and Future Trends:** Discussing ethical considerations in AI development and future trends in AI technology.

## Prerequisites for the Artificial Intelligence Course

- **Basic Programming Knowledge:** Proficiency in a programming language like Python, as it's widely used in AI development.
- **Mathematics:** A solid understanding of linear algebra, calculus, probability, and statistics.
- **Algorithms and Data Structures:** Familiarity with algorithms and how data is structured for efficient processing.
- **Machine Learning Basics:** Some exposure to machine learning concepts may be helpful, though not always required for beginner-level AI courses.
- **Logical Thinking and Problem-Solving Skills:** The ability to approach complex problems methodically.

## Target Audience for Ansible Course

The target audience for Artificial Intelligence the course includes data scientists, software engineers, IT professionals, machine learning enthusiasts, business analysts, and students interested in AI technologies. It is also suitable for professionals looking to enhance their skills in automation, predictive analytics, and AI-driven decision-making.

## Course Modules

### Introduction to Artificial Intelligence

#### **\*1. Introduction to Artificial Intelligence**

- Overview of AI Concepts
- History and Evolution of AI
- Applications of AI in Various Industries

#### **\*2. Machine Learning Fundamentals\***

- Supervised vs. Unsupervised Learning
- Classification and Regression Algorithms
- Model Training and Evaluation

#### **\*3. Deep Learning and Neural Networks\***

- Introduction to Neural Networks
- Convolutional Neural Networks (CNN)
- Recurrent Neural Networks (RNN)
- Training Deep Learning Models

#### **\*4. Natural Language Processing (NLP)\***

- Text Preprocessing Techniques
- Sentiment Analysis
- Language Modeling
- Machine Translation

## **\*5. Computer Vision\***

- Image Classification
- Object Detection and Recognition
- Image Segmentation
- Applications in Facial Recognition and Autonomous Vehicles

## **\*6. Reinforcement Learning\***

- Key Concepts of Reinforcement Learning
- Markov Decision Processes
- Q-Learning and Policy Gradient Methods
- Applications in Game AI and Robotics

## **\*7. AI Ethics and Governance\***

- Ethical Issues in AI
- Bias and Fairness in AI Systems
- Legal and Regulatory Aspects of AI
- Responsible AI Practices

## **\*8. AI Tools and Frameworks\***

- Introduction to TensorFlow, Keras, and PyTorch
- AI Development with Popular Libraries
- Building and Deploying AI Models

## **\*9. AI in Business and Industry\***

- AI for Automation and Decision Making
- AI-driven Business Analytics
- Case Studies of AI in Real-World Scenarios

## **\*10. Capstone Project\***

- Real-world AI Project
- Application of AI Models and Techniques

- Hands-on Experience with AI Systems

## **Projects & Assignments**

Our Expert trainers will provide the real time Projects & Assignments.

