



London TDM

# Artificial Intelligence and Data Science Training Courses

**Course Venue:** United Arab Emirates - Dubai

**Course Date:** From 23 August 2026 To 27 August 2026

**Course Place:** Downtown Dubai

**Course Fees:** 5,000 USD

## Introduction

AI and Machine Learning are transforming the healthcare industry, offering new ways to deliver personalized care, improve diagnostic accuracy, and streamline operations. This 5-day course provides an in-depth understanding of how these technologies are applied in healthcare settings, equipping professionals with the skills to leverage AI and Machine Learning for improved patient outcomes and organizational efficiency.

## Objectives

- Understand the fundamental concepts of AI and Machine Learning in healthcare.
- Explore key applications and use cases of AI in healthcare settings.
- Examine ethical considerations and challenges in deploying AI solutions.
- Develop skills to implement AI models and algorithms in healthcare scenarios.
- Evaluate future trends and innovations in AI healthcare technologies.

## Course Outlines

### Day 1: Introduction to AI and Machine Learning in Healthcare

- Overview of AI and Machine Learning technologies
- Understanding the role of AI in modern healthcare
- Historical perspective and evolution of AI in medicine
- Key terminology and concepts in AI and Machine Learning
- Introduction to data sources and types in healthcare

### Day 2: Applications of AI in Healthcare

- AI for diagnostic imaging and analysis
- Predictive modeling for patient outcomes
- AI-driven personalized medicine
- Streamlining hospital operations with AI
- Case studies of successful AI implementations

### Day 3: Ethical and Regulatory Considerations

- Understanding ethical challenges in AI deployment
- Data privacy and security in AI applications
- Regulatory frameworks for AI in healthcare
- Balancing innovation with patient safety
- Discussion on AI biases and fair use

### Day 4: Implementing AI Solutions in Healthcare

- Steps to building AI models for healthcare applications
- Choosing the right algorithms and tools
- Integrating AI with existing healthcare systems
- Overcoming common implementation challenges
- Hands-on session with AI tools and platforms

## **Day 5: Future Trends and Innovations**

- Emerging AI technologies in healthcare
- The role of IoT and wearables in AI healthcare
- AI-powered health monitoring and disease prevention
- Exploring the implications of AI in healthcare policy
- Panel discussion: The future of AI in healthcare