



London TDM

# Artificial Intelligence and Data Science Training Courses

**Course Venue:** United Kingdom - London

**Course Date:** From 19 October 2025 To 23 October 2025

**Course Place:** London Paddington

**Course Fees:** 7,500 USD

## Introduction

In the rapidly evolving world of technology, Artificial Intelligence (AI) plays a crucial role in automating processes and optimizing operations across various industries. This 5-day professional course, "AI for Automation and Process Optimization," is designed to equip participants with the knowledge and tools necessary to harness the power of AI in enhancing productivity and efficiency. Through a combination of theory and hands-on experience, participants will explore the fundamentals of AI, key automation techniques, and best practices for implementing AI-driven solutions in real-world scenarios.

## Objectives

- Understand the core principles of AI and its applications in automation.
- Learn to identify and analyze processes suitable for AI-driven optimization.
- Gain hands-on experience with AI tools and technologies for automation.
- Develop skills to design and implement AI solutions for process optimization.
- Explore case studies and industry applications of AI-driven automation.

## Course Outlines

### Day 1: Introduction to AI and Automation

- Overview of AI technologies and their impact on industries.
- Differentiating AI, machine learning, and deep learning.
- The role of AI in business process automation.
- Exploring the potential benefits and challenges of AI adoption.
- Introduction to AI tools and platforms for automation.

### Day 2: Identifying Opportunities for AI in Process Optimization

- Techniques for analyzing and mapping business processes.
- Evaluating processes for AI-driven automation potential.
- Data collection and preprocessing for AI models.
- Formulating an AI strategy for process improvement.
- Workshop: Identifying processes suitable for AI optimization.

### Day 3: AI Tools and Technologies for Automation

- Understanding AI development platforms and environments.
- Introduction to machine learning algorithms for process optimization.
- Using Natural Language Processing (NLP) for task automation.
- Leveraging Robotics Process Automation (RPA) in AI projects.
- Hands-on session: Building a basic AI automation model.

### Day 4: Designing and Implementing AI Solutions

- Steps in designing an AI solution for process optimization.
- Best practices for training and deploying AI models.
- Monitoring and evaluating AI solution performance.
- Addressing ethical considerations and data privacy in AI.

- Group activity: Develop a plan for implementing an AI project.

**Day 5: Case Studies and Future Trends in AI Automation**

- Exploring successful case studies of AI-driven automation.
- Analyzing the impact of AI on different industry sectors.
- Future trends and emerging technologies in AI and automation.
- Discussion: Overcoming challenges in AI adoption.
- Course wrap-up and feedback session.