



London TDM

# Artificial Intelligence and Data Science Training Courses

**Course Venue:** United Kingdom - London

**Course Date:** From 02 November 2025 To 06 November 2025

**Course Place:** London Paddington

**Course Fees:** 7,500 USD

## Introduction

The "GenAI and Large Language Models" course is designed to provide professionals with a comprehensive understanding of generative artificial intelligence and how large language models are transforming industries. Participants will gain insights into the underlying technologies, practical applications, and ethical considerations necessary to leverage these tools effectively.

## Objectives

- Understand the fundamentals of generative AI and large language models.
- Explore the technical architecture of large language models.
- Learn about practical applications and use cases in various industries.
- Grasp the ethical implications and challenges involved.
- Develop strategies to integrate these technologies into business operations.

## Course Outlines

### Day 1: Introduction to Generative AI

- Overview of AI and machine learning fundamentals.
- Introduction to generative AI and its significance.
- Historical evolution of generative models.
- Key differences between discriminative and generative models.
- Defining large language models and their potential impact.

### Day 2: Technical Deep Dive into Large Language Models

- Anatomy of large language models: architecture and design.
- Training processes and data requirements.
- Advanced techniques in model optimization and fine-tuning.
- Understanding attention mechanisms and transformers.
- Latest advancements and trends in model architectures.

### Day 3: Applications and Industry Use Cases

- Case studies on the deployment of generative AI.
- Applications in healthcare, finance, and customer service.
- Creating content and media using generative AI tools.
- Enhanced natural language processing capabilities.
- Leveraging AI for innovative business operations.

### Day 4: Ethical Implications and Challenges

- Understanding ethical considerations in AI deployment.
- Addressing bias and fairness in large language models.
- Privacy concerns and data security issues.
- Regulatory landscapes and compliance standards.
- Developing ethical guidelines and oversight mechanisms.

## **Day 5: Strategic Integration and Implementation**

- Assessing organizational readiness for AI integration.
- Developing roadmaps for AI adoption in business operations.
- Building cross-functional teams to support AI projects.
- Measuring impact and returns on AI investments.
- Future directions and pathways in generative AI.