

# AI-Driven Healthcare Performance and Predictive Analytics

## COURSE OVERVIEW

This course explores the transformative role of artificial intelligence and advanced data analytics in enhancing healthcare delivery, decision making and patient outcomes. Participants will gain practical insights into how AI tools, machine learning models and predictive analytics can be used to optimize hospital operations, improve diagnostic accuracy, forecast patient risks and streamline clinical workflows. The course blends theoretical concepts with practical healthcare applications, enabling professionals to interpret complex health data, design data driven solutions and support medical decisions based on evidence for improved performance and efficiency across healthcare systems.

## WHO SHOULD ATTEND?

This course is designed for healthcare professionals, medical administrators, data analysts, clinical researchers and IT specialists working in healthcare settings who seek to leverage AI and predictive analytics for improved healthcare performance. It is also ideal for policymakers and decision makers in the health sector interested in understanding how technologies driven by data can inform strategic planning and resource optimization.

## COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Understand the fundamentals of AI and predictive analytics in healthcare.
- Apply machine learning techniques to identify patterns and trends in medical data.
- Develop predictive models for patient outcomes, disease progression, and operational efficiency.
- Interpret and communicate data insights for informed clinical and administrative decisions.
- Integrate AI-driven tools into healthcare performance improvement frameworks.
- Evaluate ethical, regulatory, and data governance considerations in AI healthcare applications.

## KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Foundations of AI and machine learning in healthcare.
- Predictive modelling for patient care and hospital management.
- Real-world case studies and hands-on data analysis exercises.
- Ethical, regulatory, and data privacy considerations in AI healthcare systems.
- Practical sessions using AI-powered analytics platforms and visualization tools.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded