

# AI+ Healthcare™

**Duration:** 08 hours

## Course Overview

The AI+ Healthcare certification program offers a comprehensive exploration of technologies like machine learning, deep learning, and neural networks within the healthcare domain. These tools are utilized to enhance diverse areas including medical imaging, diagnostics, treatment planning, patient monitoring, and healthcare administration. AI enhances diagnostic accuracy, tailor treatment strategies, and facilitates streamlined resource allocation. Nonetheless, integrating AI into healthcare poses challenges concerning data integrity, privacy, ethical concerns, and regulatory adherence. As AI continues to advance, it holds the potential for significant progress in patient care, predictive analytics, and operational efficacy within the healthcare industry.

## Course Prerequisites

- Basic understanding of healthcare world, no technical expertise or knowledge required.
- Readiness to think innovatively, generating novel ideas, and effectively utilizing AI tools in healthcare
- Openness to exploring various aspects of AI in healthcare, including its implications, challenges, and opportunities.
- Strong interest and motivation to delve into the integration of AI technologies within the healthcare sector.

## Course Agenda

### Module 1: Introduction to Artificial Intelligence (AI) in Healthcare

- Fundamentals of Artificial Intelligence
- AI in the Healthcare Ecosystem
- Ethical and Regulatory Framework

### Module 2: Data Handling and AI Modeling

- Data Acquisition and Management
- Preprocessing Techniques for Medical Data
- Model Development and Validation

### Module 3: AI in Medical Imaging

- Introduction to Medical Imaging
- AI Techniques in Imaging
- Implementation and Future Trends

### Module 4: AI in Diagnostics and Predictive Analytics

- AI-powered Diagnostic Systems
- Predictive Analytics in Healthcare
- Challenges and Solutions

### **Module 5: AI in Treatment Planning and Personalized Medicine**

- Customized Treatment Solutions
- Machine Learning Models in Treatment
- Case Studies and Ethics

### **Module 6: AI in Patient Monitoring and Care Management**

- Wearable Technologies and IoT in Healthcare
- Remote Patient Monitoring Systems
- Impact on Healthcare Delivery

### **Module 7: AI in Health Insurance and Healthcare Management**

- AI in Health Insurance
- Operational Efficiency in Healthcare
- Future of AI in Health Systems

### **Module 8: Advanced Topics and Future Directions in AI+ Healthcare**

- Innovations in AI and Their Impact on Healthcare
- Interdisciplinary Approaches
- Preparing for the Future