

ABOUT THE INSTITUTE

Maulana Azad National Institutes of Technology Bhopal (MANIT) is an institute of National importance. It was formerly known as Maulana Azad Collage of Technology (MACT), which was India's one of the first eight Regional Engineering colleges. The institute has been named after the great scholar, educationist and the first education Minister of India, Maulana Abdul Kalam Azad. The Govt. of India and the Govt. of Madhya Pradesh jointly sponsored the institute in 1960 to attract bright young students from across the country. The institute is successfully meeting the objective of producing skilled manpower with the highest quality to cope up with challenges of ever evolving industrial needs of the country.

About Bhopal

It is the capital of Madhya Pradesh and is commonly known as 'city of lakes'. It is well connected from different parts of the country by rail and air routes. The institute is around 9 Km away from Bhopal main railway station and 6 Km from Rani Kamlapati railway station. Bhopal airport is around 16 Km away from the institute. The weather of Bhopal is moderate.

Objective

The objective of this program is to give exposure, create awareness, and competence about artificial intelligence and deep learning for healthcare applications.

Eligibility

Faculties from Academic Institutions, Research organizations, Research scholar, Masters Students and Bachelor students with background in related areas. **MAXIMUM NUMBER OF PARTICIPANTS IS LIMITED TO 30. THE SEATS WILL BE ALLOTTED ON FIRST COME FIRST SERVE BASIS. THE WORKSHOP WILL BE CONDUCTED IN ONLINE MODE. THE REGISTRATION IS FREE OF COST.**

Chief Patron

Dr. K. K. Shukla, Director, MANIT Bhopal.

Patron

Dr. D. Agarwal, Head of Department, ECE, MANIT Bhopal.

Coordinators

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Associate Professor

Dr. Laxmi Kumre

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IMPORTANT

Make sure to download this brochure from official website of MANIT to avoid any tampering in details.

Website:- www.manit.ac.in

Sponsored
Short Term Training Program

on

Artificial Intelligence and Deep Learning for Healthcare Applications.

May 25-29, 2026

Organized by



**Department of Electronics and Communication Engineering,
Maulana Azad National Institute of Technology
Bhopal-462051
Madhya Pradesh, India**

Sponsored by

M.P. Council of Science & Technology,
Bhopal



Madhya Pradesh Council Of Science & Technology

Introduction

STTP on Artificial Intelligence and Deep Learning for Healthcare Applications is conducted to address the rapidly growing role of intelligent technologies in modern healthcare systems. Advancements in artificial intelligence and deep learning techniques have enabled the development of efficient diagnostic tools, predictive models, and decision-support systems that assist healthcare professionals in improving patient outcomes and operational efficiency.

These technologies are increasingly being applied in areas such as medical image analysis, disease prediction, personalized treatment planning, and remote patient monitoring.

Recent trends in healthcare analytics focus on improving accuracy, reliability, and real-time processing capabilities to support data-driven clinical decision-making in diverse healthcare environments. Additionally, intelligent healthcare systems are experiencing significant improvements through the integration of wearable sensors, electronic health records, and cloud-based platforms for continuous monitoring and management of patients.

Emerging developments also include the adoption of explainable AI models and secure data-handling techniques to enhance trust, transparency, and privacy in medical applications. As the demand for smart and accessible healthcare solutions continues to grow, ongoing research and development efforts are driving innovation in artificial intelligence and deep learning technologies for next-generation healthcare systems.

Course Content

1. Introduction to Artificial Intelligence in Healthcare Systems
2. Fundamentals of Machine Learning and Deep Learning Techniques
3. Medical Image Analysis using Deep Learning (MRI, CT, X-ray Applications)
4. Disease Prediction and Clinical Decision Support Systems
5. Deep Learning Models for Signal-Based Healthcare Data (ECG, EEG Analysis)
6. Natural Language Processing for Electronic Health Records (EHR)
7. Wearable Sensors and Remote Patient Monitoring using AI
8. Explainable AI in Healthcare Applications
9. Data Privacy, Security, and Ethical Issues in Healthcare AI
10. Deployment of AI Models in Smart Healthcare and Telemedicine Platforms
11. Deep Learning Architectures for Healthcare Applications (CNN, RNN, Transformer Models)
12. AI for Early Detection and Prediction of Chronic Diseases (Cardiac Disorders, Diabetes, Cancer Screening)
13. Edge AI and IoT-based Smart Healthcare Systems for Real-Time Monitoring

HOW TO REGISTER

Desirous candidates may register using the following google form -

LINK-

[Click Here](#)

QR CODE-



The seats will be allotted on first come first serve basis. The workshop will be conducted in ONLINE MODE. The registration is FREE OF COST