

## **ABOUT THE PROGRAM:**

The FDP aims to provide a platform for academicians, industry professionals, and researchers to explore the transformative potential of artificial intelligence (AI) and machine learning (ML) in civil engineering. Participants will gain insights into the applications of AI & ML in predicting and mitigating natural disasters, designing resilient infrastructure, and making data-driven decisions. The program will feature expert speakers from renowned institutions and industries, offering case studies and hands-on knowledge to equip participants with cutting-edge tools and methodologies for disaster management and infrastructure resilience.

## **ABOUT SHIKSHA MANDAL:**

shiksha Mandal is a century old Bajaj Educational Trust, based at Wardha, well known for providing value based, quality education at a reasonable cost. It was founded by Late Shri. Jamnalal Bajaj. The Nation's first education conference was held in Shiksha Mandal in 1937 and was presided over by Mahatma Gandhiji. It is running eight institutions successfully including Science, Commerce. Polytechnic, Agriculture with over 10,000 students.

## **ABOUT THE COLLEGE:**

Bajaj Institute of Technology, established in 2017 is the fast growing institute running Civil, Computer, Electrical, and Mechanical Engineering Branches. Its unique Architecture is designed by Architect Christopher Benninger.

Bajaj Institute of Technology is Affiliated to Dr. Babasaheb Ambedkar Technology University (DBATU), which is the State Technological University of Maharashtra. BIT focuses on enhancing students' capability through rigorous learning; an emphasis on learning fundamentals and capacity to use them through hands on work in the workshop and laboratories and through projects. All students undergo internship in the industry during the summer break. In short it is committed to producing industry ready engineers and good human beings who will innovate and deliver their best in the profession.

## **ABOUT THE DEPARTMENT:**

Civil Engineering Department has experienced and dedicated faculty and well-equipped stateof-the-art laboratories. Various testing facilities are available at the department, including UTM, CTM, Plate load test, Benkelman beam, Non Destructive Testing (Rebound Hammer, UPV, Half- Cell Potential. Rebar detector, etc.), CAD Lab (Licenced software of Etabs and SAFE). The department is actively involved in consultancy projects of various government, public and private agencies. The department has expertise in the structural design of a wide range of buildings, including residential, institutional, commercial, farmhouse, hospital, etc. The department is also involved in third party audit and structural stability audit of various structures.

## **ELIGIBILITY CRITERIA**

- All faculty members
- · Research Scholars
- Industry Professionals



Shiksha Mandal's



## Bajaj Institute of Technology, Wardha

(Recognized under section 2(f) of UGC Act 1956) (Affiliated to DBATU, Lonere, Raigad, Maharashtra)

One Week Online
Faculty Development Program
Sponsored by

AICTE Training and Learning (ATAL)

Academy





Real time applications of AI & ML in Disaster Management & Resilient Infrastructure

17th - 22nd February 2025

Organized by
Department of Civil Engineering
Bajaj Institute of Technology

Approved by AICTE,
Accredited by NAAC with "A" grade
Affiliated to DBATU
Arvi Road, Pipri Wardha,
Maharashtra -442001

### **OBJECTIVE OF THE FDP:**

- To investigate how AI and ML can be used in real-time to forecast, manage, and minimize the effects of natural disasters, such as earthquakes, floods, and other emergencies.
- To emphasize how AI and ML are used to build disaster-resistant infrastructure that ensures sustainability and safety.
- To give participants the tools they need to use AI and ML to make data-driven decisions that will effectively address infrastructure resilience and catastrophe response.
- To present effective case studies and real-world uses of AI and ML in infrastructure development and disaster relief globally.
- To encourage cooperation between data science, civil engineering, and other interdisciplinary domains in order to develop creative approaches to disaster resilience.

#### **Registration Procedure**

Eligible candidates have to register through the ATAL portal

**Registration Fee:** No Registration Fee

# Confirmation of Participation and Certificates:

Upon registration, confirmation will be sent to the selected participants through email The detailed schedule and link for online platform will be shared only to the confirmed participants through email and WhatsApp. E-Certificate will be provided by the ATAL academy to those who have attendance more than 80%, filled daily feedback form and successfully completed the assessment test with score more than 75% at the end of the program.

#### **CHIEF PATRON**

Shri. Sanjay Bhargava

Chairman, Shiksha Mandal

#### **PATRON**

**Dr. Narendra Kanhe** Principal, BIT Wardha

#### **CONVENER**

Mr. Deepak Mangrulkar Head of Civil Department, BIT Wardha

#### COORDINATOR

**Dr. Prathik Kulkarni** Senior Assistant Professor, BIT Wardha

#### **CO COORDINATOR**

**Dr. Harshad Phadke**Assistant Professor, BIT Wardha

#### **COMMITTEE MEMBERS**

Dr. Vikas Thakur (Associate Professor)
Mr. Amit Khandve (Sr. Assistant Professor)
Mr. Vikas Ravekar (Sr. Assistant Professor)
Dr. Nisha Thakur (Assistant Professor)
Dr. Ram Wanare (Assistant Professor)
Dr. Aditya Nilawar (Assistant Professor)

#### ADDRESS FOR COMMUNICATION

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Dr. Harshad Phadke +91 9730759589 harshad.phadke@bitwardha.ac.in

## **SPEAKERS**

Day 1: 17-02-2025



Dr. Saznizam Sazmee Sinoh Senior Lecturer, Dept. of Civil Engineering, University of Malaya, Lumpur, Malaysia Session 1 - 6:30 PM - 8:00 PM



Dr. Vipul Patel
Senior Lecturer,
Civil Engineering,
La Trobe University, Australia

Session 2 - 8:00 PM - 9:30 PM

Day 2: 18-02-2025



B P Karamchandani MvDad.com, Founder and CEO, Mumbai, India Session 3 - 6:30 PM - 8:00 PM Session 4 - 8:00 PM - 9:30 PM

Day 3: 19-02-2025



Dr. Anadee Kulkarni Senior /Associate Engineer, Diagnostics group, Walter P Moore, Pune, India Session 5 - 6:30 PM - 8:00 PM



Dr. Vishal Deoda Senior Engineering, Thornton Thomasetti, Pune Session 6 - 8:00 PM - 9:30 PM

Day 4: 20-02-2025



Dr. Ajay U. Chavadekar Assistant Professor, NBN Sinhgad Technical Institutes Campus, Pune, India Session 7 - 6:30 PM - 8:00 PM



Priti Prakash Jorvekar Senior Principal Development Engineer, Calsoft Pvt Limited, Pune, India

Session 8 - 8:00 PM - 9:30 PM

Day 5: 21-02-2025



Dr. Arvind Kumar Assistant Professor, MEC, Hyderabad, Telanagna, India Session 9 - 6:30 PM - 8:00 PM



Dr. Chandan Kumar Singh Assistant Professor, Department of Civil Engineering, NIT- Raipur Session 10 - 8:00 PM - 9:30 PM

Day 6: 22-02-2025



Dr. Rahul Ralegaonkar Professor, Department of Civil Engineering, VNIT-Nagpur Session 11 - 2:00 PM - 3:30 PM



Mr. Ranjeet Desai CFD Engineer, WaterUnit Infrastructure Consultancy LLP, India Session 12 - 3:30 PM - 5:00 PM



Dr.Fayaz Ahmad Sofi Assistant Professor, Department of Civil Engineering, NIT-Srinagar Session 13 - 5:00 PM - 6:30 PM