FDP on
"Application of Machine Learning in Civil Engineering"
(AMLCE-2025)
From 22nd to 26th September 2025
Last Date for Registration: 16/09/2025

Resource Persons

 **Dr. Pijush Samui** Professor (NIT Patna)	 **Dr. Chandan Sarangi** Associate Prof. (IIT M)
 **Dr. Rahul Biswas** Asst. Prof. (VNIT N)	 **Dr. Md. Ayaz** Asst. Prof. (AMU)
 **Dr. A D Prasad** Asst. Prof (NITRR)	 **Dr. V. K. Vidyarthi** Asst. Prof. (NIT RR)

Registration Details

For **Online Registration & Fees Payment,** please scan QR code or follow the link below:

https://forms.gle/s1UZRMMxFK47gy2u5

For more details please visit website:
https://sites.google.com/view/amlce2025/home

Fee Payment

Name of A/c holder: Director NIT Raipur
A/c No.: 38027633250
IFSC Code: SBIN0002852
Bank & Branch: SBI (NIT Raipur Branch)

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Director, NIT Raipur

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Preeti Tiwari, Monika Verma

Faculty Development Program

on

Application of Machine Learning in Civil Engineering (AMLCE-2025)

(Hybrid Mode)

From 22nd to 26th September 2025

Organized by

Department of Civil Engineering
National Institute of Technology Raipur
Pin- 492010 (Chhattisgarh)

In Association with

ISHRAE
RAIPUR CHAPTER

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Department of Civil Engineering (NIT Raipur)

About the Institute:

National Institute of Technology Raipur situated in the capital of Chhattisgarh, has proven to be "avant-grade' in the field of science and technology over past few decades in this region. With sweet memory of foundation ceremony by first president of India, Hon'ble Dr. Rajendra Prasad on 14th September 1956. The institute started with two departments namely Metallurgical and Mining Engineering. Later the inauguration of the Institute building was done by the first prime minister Hon'ble Pt. Jawahar Lal Nehru on 14th March 1963. From 1st December 2005, the institute has converted to the National Institute of Technology Raipur. At present, the institute offers undergraduate and PhD in twelve different disciplines. NIT Raipur is well connected with Mumbai, Delhi and all metro cities by regular flights and is on the main Howrah-Mumbai railway route. The institute is 5 km from the Raipur railways station and 18 km from airport on NH-6, the Great Eastern Road.

About Department:

The Department of Civil Engineering at NIT Raipuris producing high quality technical manpower; required by various industrial establishments, R&D organizations, Govt. & public establishments and academic institutions since 1958. The Department offers B.Tech degree in Civil Engineering and M.Tech degree with specializations in Water Resources Development & Irrigation Engineering and Structural Engineering. The Dept has been offering Ph.D. program in various specializations. The Dept also encourages its students to engage in extra-curricular and co-curricular activities, essential for developing organizational skills. The faculty members of the dept are involved in research and consultancy activities, and they continue to enjoy academic leader role in the country. Govt. of India has recognized Civil Engineering Department as State Technical Agency for implementation of its ambitious projects of Pradhan Mantri Gram SadakYojana (PMGSY) & National Rural Drinking Water Programme (NRDWP)

OBJECTIVES:

- To familiarize faculty members with the fundamentals of Artificial Intelligence and Machine Learning and their potential applications in various Civil Engineering domains.
- To enable participants to apply AI/ML techniques in solving real-world Civil Engineering problems such as structural health monitoring, traffic prediction, material optimization, and water resource management.
- To demonstrate the use of modern tools and software platforms (e.g., Python, MATLAB, Tensor Flow, Scikit-learn) for developing AI/ML models specific to Civil Engineering datasets.
- To promote interdisciplinary research by integrating AI/ML with traditional Civil Engineering practices to enhance efficiency, safety, sustainability, and decision-making processes.

Theme/Scope:

This FDP aims to bridge the gap between traditional Civil Engineering practices and modern AI/ML technologies. It will cover applications in structural analysis, construction management, geotechnical evaluation, environmental monitoring, and transportation systems. The program will include hands-on sessions on data-driven modelling, predictive maintenance, and decision-support systems, enabling faculty to incorporate AI/ML in teaching, research, and consultancy projects aligned with the evolving needs of smart and sustainable infrastructure development.

Venue:

Department of Civil Engineering
National Institute of Technology, Raipur
492010 ,INDIA

Important Topics to be covered:

- To introduce the fundamentals of Artificial Intelligence (AI) and Machine Learning (ML) and their relevance in solving real-world Civil Engineering problems.
- To explore practical applications of AI/ML in Civil Engineering domains such as Geotechnical analysis, material behaviour modelling, Structural health monitoring, Traffic prediction, Construction management, , Climate modelling, Hydraulics and Water Resources Engineering.
- To equip participants with hands-on experience using AI/ML tools and techniques for data analysis, predictive modelling, and decision-making in Civil Engineering projects.

Targeted Participants:

- Students/ Research Scholars
- Faculty members
- Industry Professionals
- Target Departments: Civil, Environmental, Architecture, Chemical, Mining, Mechanical

Registration Fee (excluding 18% GST)

Participants	Amount (in INR)
Students	Rs 1300/-+18% GST
Students (Online)	Rs 750/-+18% GST
Faculty & Industry Delegates	Rs 2000/-+18% GST
Faculty & Industry Delegates (Online)	Rs 1500/-+18% GST

For offline participants, registration kit, tea and lunch will be provided during training program. Fee is non-refundable.

Certificates will be issued to the participants only after attending the complete course.