# Report on One-week FDP "Artificial Intelligence & IoT Applications in Civil Engineering (ICT-197)"

(HRDC, Integral University, Lucknow, a Remote Center of NITTTR, Chandigarh)

12<sup>th</sup> September to 16<sup>th</sup> September 2022

The Human Resource Development Centre, Integral University as a remote centre of NITTTR, Chandigarh has organized a five-day FDP through Information and Communication Technology (ICT) on "Artificial Intelligence & IoT Applications in Civil Engineering" from 12-16 Sept 2022 at the Integral University, Lucknow in association with Ministry of Education, Government of India's National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh.



The participants gained knowledge about Artificial Intelligence (AI), the Internet of Things (IoT), and their applications, which would aid in the process of problem-solving in Civil Engineering. Total Fifteen technical sessions were held from a wide variety of topics and each session was led by a team of experts viz.:

### Day 1:

- Registration and Inauguration session was taken by Host Center Coordinator Er. Himmi Gupta, NITTTR Chandigarh & Remote Center Coordinator by Dr. Sheeba Praveen, Integral University, Lucknow.
- Artificial Intelligence & IoT applications in Civil Engineering by Er. Himmi Gupta, NITTTR Chandigarh.
- Introduction to IoT and its applications by Dr. Prashant Upadhyaya, Associate Professor Chandigarh University.

#### Day 2:

- Basic MATLAB by Er. Himmi Gupta, NITTTR Chandigarh.
- Practice session on MATLAB by Er. Himmi Gupta, NITTTR Chandigarh.

• Intelligence Buildings by Ar. Jit K. Gupta, Former Chairman, IGBC Chapter.

## Day 3:

- Basic of Artificial Neural Network & Matlab Application by Dr. Lini Mathew, NITTTR, Chandigarh.
- IoT for Structural Health Monitoring by Dr. Satish Kumar, Sr. Principal Scientist, C.S.I.O Chandigarh.
- Optimization of data using ORANGE Tool by Dr. Amit Kamra, GNDEC, Ludhiana.

## Day 4.

- Introduction to Fuzzy Logic and MATLAB Application by Dr. Lini Mathew, NITTTR, Chandigarh.
- Virtual Reality Application for Civil Engineering (Lab) by Ajjay Parge, Digital Art India, Pune.
- Practice Session on optimization using ORANGE Tool by Dr. Amit Kamra, GNDEC, Ludhiana.

#### Day 5:

- Infrastructure System for Smart Cities by Prof. Jagdish H. Godihal, Prof., Dean, Presidency University, Bengaluru.
- VR Lab Demonstration of Ultratech Cements by Er. Himmi Gupta, NITTTR Chandigarh.
- Course Exam, Feedback and Valediction session by Host Center Coordinator Er. Himmi Gupta, NITTTR Chandigarh & Remote Center Coordinator by Dr. Sheeba Praveen, Integral University, Lucknow.

Overall thirty one participants benefited from this FDP. This program was very unique as Integral University's remote centre was very much appreciated for active participation and interaction by NITTTR, Chandigarh. The program was coordinated by Dr. Sheeba Praveen as Remote Center Coordinator and Mr. Mohd Arif Ali Usmani as Technical supporting staff from the Department of Computer Science and Engineering.

**Glimpses of the Event:** 



