National Institute of Technical Teachers' Training & Research, Bhopal

Training Programme on "Building Information Modelling for Civil Engineers" (GUJ-8)

1. Rationale:

Building Information Modelling (BIM) is one of the major developments that has been seen in Architectural, Engineering, Construction and Operation (AECO) industry over the last two decades. Many countries have taken a shift towards BIM adoption. Government organizations have made BIM implementation mandatory for contractors while delivering their projects. India having a multibillion-dollar AECO industry and being the second largest growing industry, has tremendous potential and scope for growth of BIM. This programme is planned to for the faculty members from civil engineering discipline who may develop required skill in the students so that they may get employment in AECO industry. The Program also set with an objective of creating more opportunities in terms of entrepreneurship by learning advanced techniques of data management by using BIM platform in construction and engineering projects. This training programme will help the technical teachers of civil engineering and allied discipline to understand the latest development in the AECO industry.

2. Program Outcomes

The Participant will be able to:

- ➤ Develop awareness about BIM used in buildings, infrastructure and smart cities projects.
- ➤ Develop the concept of scheduling and planning of project activities in Building Information Model Common Data Environment.
- ➤ Apply concept of energy analysis, sustainability and cost aspect of Project with reference of BIM Common Data Environment.
- > Implement concept of parametric modelling on basic components of a project.

3. Programme Contents

BIM Uses, BIM in project life cycle, BIM in buildings, infrastructure and smart cities project, Modelling on basic components of a project, Scheduling and planning of project activities in Building Information Model, Energy analysis, sustainability and cost aspect of Project, BIM application for engineers.

4. Instructional Strategy

Following training strategies will be used: Interactive Lectures, Input-cum-Discussions, analogies, Interactive learning, field visit, case study analysis, demonstrations, team teaching, action learning & multiple Role Playing, assignments, group Creativity techniques, presentations and video showcasing.

5. Assessment & Grading

- Group Assignments
- Individual Tasks
- Summative Assessment through MCQ-based test.

6. Target Group

The faculty members from AICTE recognized technical Institutes.

7. Venue and dates

Venue: NITTTR Extension Center, Ahmedabad

Date: 19 to 23 June, 2023

8. Program Team

- Prof. M.C. Paliwal -Coordinator, DCEEE, NITTTR, Bhopal (Email- mcpaliwal@nitttrbpl.ac.in) (Mobile -+919407271980)
- Dr. Subrat Roy Professor, DCEEE, NITTTR, Bhopal (Email- sroy@nitttrbpl.ac.in) (Mobile +917869529500)
- Experts from institutions/industry.

9. Programme Schedule

Day	Session I 10.0 - 11.30	Session II 11.45-1.15	Session III 2.15 - 3.45	Session IV 4.00- 5.30
1.	Registration, General Instructions and Program Orientation.	BIM Uses & BIM in project life cycle.	BIM in buildings, infrastructure and smart cities project	Task 1 -
2.	Modelling on basic components of a project		Task	
3.	Scheduling and planning of project activities in Building Information Model		Task	
4.	Energy analysis, sustainability and cost aspect of Project		Task	
5.	BIM application for engineers		General discussions & presentation	Achievement Test followed by Feedback & Valedictory Function.