



## Outreach & Dissemination Services Office CSIR – Central Building Research Institute Roorkee – 247667 (UK)

### Skill Development Training Programme on 'Latest Trends in Building Construction Technologies'- Batch II July 16<sup>th</sup> -18<sup>th</sup>, 2025

Advancing technical education through practical exposure, CSIR-CBRI, Roorkee organized a national training program on "Latest Trends in Building Construction Technologies" was organized from 16th to 18th July 2025 at CSIR–CBRI, Roorkee, under the CSIR Integrated Skill Initiative. The program was designed to introduce trainee students to the latest advancements and sustainable practices in the construction sector, helping them bridge the gap between theoretical knowledge and practical application.



The training program received enthusiastic participation from students of various technical institutes across the country, bringing together a diverse group eager to gain hands-on exposure to emerging trends in building technology. Key focus areas included sustainable design, prefabricated systems, advanced construction materials, structural safety, soil–structure interaction, and architectural planning.

At the outset, Sh. Nadeem Ahmad, Chief Scientist, welcomed Prof. R. Pradeep Kumar, Director, CSIR–CBRI, along with the attending S&T staff members and students. The program was formally inaugurated by Prof. Kumar, who encouraged students to adopt smart and green construction practices. He also emphasized the importance of building strong personal values to tackle future challenges effectively.

The training program was coordinated by Dr. Tabish Alam, Senior Scientist, and featured a series of expert sessions covering vital topics such as precast construction systems, prefabricated technologies, energy-efficient building design, and smart construction methods.

Er. Ashish Pippal, Nodal Officer of the CSIR Integrated Skill Initiative, delivered the vote of thanks. Dr. C.S. Meena and Mr. Rajnish Kumar (Technical Assistant) also played key roles in ensuring smooth coordination and contributing to a meaningful learning experience.



### **Key Learning Sessions & Activities**

#### **Day 1 (16 July 2025)**

The program commenced with a session by Sh. Nadeem Ahmad, Chief Scientist, who introduced CSIR–CBRI, Roorkee—one of the oldest CSIR laboratories, established in 1947 with a dedicated focus on building science and construction technologies. He provided an overview of the institute’s structure, comprising eight R&D divisions, a Delhi Extension Centre, and various Management Services Groups. His presentation offered trainees valuable insights into CSIR’s mission and CBRI’s pivotal role in advancing sustainable and innovative construction practices in India.

The second session was conducted by Dr. Soumitra Maiti, Principal Scientist, on the topic “Environmental Aspects of Building Construction.” He discussed the environmental impacts of construction activities, sustainable construction methods, and green building practices.

This was followed by a session by Dr. Md. Muslim Ansari, Senior Scientist, who spoke on “Pre-Fabricated Structural Elements.” He highlighted the advantages of modular components and prefabrication techniques in achieving faster and more efficient construction.





The day concluded with a lab visit to the R&D facilities of GEGH, SE Group, and Rural Park, coordinated by Ms. Sanskriti Sharma & Ms. Iqra, Project Staff where students observed experimental setups and ongoing innovations in building technologies.



## On Day 2 (July 17, 2025)

The program began with a brief recap of Day 1 by Dr. Tabish Alam, Sr. Scientist & Course Coordinator highlighted key insights on energy efficiency in buildings. This was followed by two technical sessions—Dr. Anindya Pain, Principal Scientist discussed about the “Design of Geo-synthetic Reinforced soil retaining structures”, while Dr. Suman Kumar, Scientist took the lecture on “Structural modelling under blast and impact loads”.





After the lunch break, participants visited the R&D facilities of BMES, ACSC, and FSE groups, coordinated by Ms. Sanskriti Sharma, where they explored ongoing research and innovative technologies in building materials, structural systems, and fire safety.



- *Lab Visit at FSC Group*



- *Lab Visit at BMES Group*



- *Lab Visit at ACSC Group*

### On Day 3 (July 18, 2025)

Day 3 began with a briefing of the previous day's sessions, setting the stage for another insightful lineup. Er. I.A. Siddiqui, delivered the first session on “Building Construction Systems”, highlighting modern construction techniques and system-based approaches for enhanced efficiency and quality. This was followed by Er. Rajesh Kumar, Principal Scientist delivered the session on “Cost-Effective Sustainable Building Materials Derived from Industrial Waste”, focusing on innovative solutions for environmentally conscious and economically viable construction. Lastly, Ar. Naveen Nishant, Scientist presented lecture on “Architectural Planning & Design of Buildings”, emphasizing integrated design principles that balance aesthetics, functionality, and sustainability.







The day concluded with a visit to the Construction Technology Demonstration Park, coordinated by Ms. Sanskriti Sharma and Ms. Iqra, where participants gained hands-on exposure to advanced building technologies and real-world applications.



### Schedule of Training

<div style="display: flex; justify-content: space-between; align-items: center;">  <div style="text-align: center;"> <b>सीएसआईआर-केन्द्रीयभवनअनुसंधानसंस्थान, रुड़की</b>  <b>CSIR - Central Building Research Institute, Roorkee</b> </div>  </div>			
<b>Training Programme on</b> <b>‘Latest Trends in Building Construction Technologies’ for Trainee Students (Batch I)</b> <b>July 16-18, 2025</b>			
<b>Programme Schedule</b>			
<b>Hours</b>	<b>Wednesday July 16, 2025</b>	<b>Thursday July 17, 2025</b>	<b>Friday July 18, 2025</b>
09.00	Registration & Inauguration	Recapitulation of Day 1	Recapitulation of Day 2
10.00 - 11.00	Overview of CSIR-CBRI <b>Mr. Nadeem Ahmed</b>	Energy Efficiency of Buildings <b>Dr. Tabish Alam</b>	Building Construction Systems <b>Er. I.A. Siddiqui</b>
11.15	<b>Tea Break</b>		
11.15-12.15	Environmental Aspects for Building Construction <b>Dr. Soumitra Maiti</b>	Design of Geosynthetic Reinforced Soil Retaining Structures <b>Dr. Anindya Pain</b>	Architectural Planning & Design of Buildings <b>Ar. Naveen Nishant</b>
12.15 - 13.15	Pre-Fabricated Structural Elements <b>Dr. Md. Muslim Ansari</b>	Modelling of Structures under Blast & Impact <b>Dr. Suman Kumar</b>	Cost-Effective Sustainable Building Materials Derived from Industrial Waste <b>Er Rajesh Kumar</b>
13.15	<b>Lunch Break</b>		
14.30 - 16.00	Lab Visit – R&D Facilities of GEGH, SE Group & Rural Park <b>Ms. Sanskriti Sharma</b>	Lab Visit – R&D Facilities of BMES, ACSC & FSE Group <b>Ms. Sanskriti Sharma</b>	Visit to Construction Technology Demonstration Park <b>Ms. Sanskriti Sharma,</b>

## **Participants list**

S. No.	Name of Participants	Name in Hindi	Institute
1.	Mr. Prashant Kumar	श्री प्रशांत कुमार	NIT, Patna, Bihar
2.	Mr. Uttkarsh Uddyan	श्री उत्कर्ष उदयन	Integral University Lucknow,UP
3.	Mr. Imran Siddiqui	श्री इमरान सिद्दीकी	Integral University Lucknow,UP
4.	Mr. Zaid Ahmad Ansari	श्री ज़ैद अहमद अंसारी	Integral University Lucknow,UP
5.	Mr. Arish Pervaiz	श्री अरिश परवेज़	Integral University Lucknow,UP
6.	Mr. Arish Ali	श्री आरिश अली	Integral University Lucknow,UP
7.	Mr. Md. Yusuf Noor	श्री मोहम्मद यूसुफ नूर	Integral University Lucknow,UP
8.	Mr. Mohammad Aamir Khan	श्री मोहम्मद आमिर खान	Integral University Lucknow,UP
9.	Mr. Rizwan Khan	श्री रिज़वान खान	Integral University Lucknow,UP
10.	Mr. Aman Mishra	श्री अमन मिश्रा	SKIT, Jaipur, Rajasthan
11.	Mr. Hemant Prajapat	श्री हेमन्त प्रजापत	SKIT, Jaipur, Rajasthan
12.	Mr. Tulsiram Bhil	श्री तुलसीराम भील	SKIT, Jaipur, Rajasthan
13.	Mr. Gourav Galav	श्री गौरव गालव	SKIT, Jaipur, Rajasthan
14.	Mr. Bhavesh Sharma	श्री भावेश शर्मा	SKIT, Jaipur, Rajasthan
15.	Ms. Saumya Kumari	सुश्री सौम्या कुमारी	NIT, Kurukshetra, Haryana
16.	Mr. Ritesh Kumar Mishra	श्री रीतेश कुमार मिश्रा	NIT, Kurukshetra, Haryana
17.	Mr. Divyansh Gupta	श्री दिव्यांश गुप्ता	NIT, Kurukshetra, Haryana
18.	Mr. Tarini Prasad Samal	श्री तारिणी प्रसाद सामल	NIT, Rourkele, Odisha
19.	Mr. Dibya Raman Patra	श्री दिव्य रमण पात्र	NIT, Rourkele, Odisha
20.	Ms. Jyoti Saini	सुश्री ज्योति सैनी	NIT, Rourkele, Odisha
21.	Mr. Nitesh Sahu	श्री नितेश साहू	NIT, Rourkele, Odisha
22.	Mr. Vishaldeep Singh	श्री विशालदीप सिंह	Punjab State Aeronautical Engg. College, Patiala, Punjab
23.	Mr. Arshdeep Singh	श्री अर्शदीप सिंह	Punjab State Aeronautical Engg. College, Patiala, Punjab

24.	Ms. Bimaljeet Kaur	सुश्री बिमलजीत कौर	Punjab State Aeronautical Engg. College, Patiala, Punjab
25.	Ms. Prabhjot Kaur	सुश्री प्रभजोत कौर	Punjab State Aeronautical Engg. College, Patiala, Punjab
26.	Ms. Sukhdeep Kaur	सुश्री सुखदीप कौर	Punjab State Aeronautical Engg. College, Patiala, Punjab
27.	Ms. Sawarnjeet Kaur	सुश्री सवरनजीत कौर	Punjab State Aeronautical Engg. College, Patiala, Punjab
28.	Ms. Gaytri	सुश्री गायत्री	Punjab State Aeronautical Engg. College, Patiala, Punjab
29.	Ms. Tara Shankhavar	सुश्री तारा शंखवार	Punjab State Aeronautical Engg. College, Patiala, Punjab
30.	Mr. Hardik Kachhawa	श्री हार्दिक कछावा	Medi-Caps University, Indore, M.P.
31.	Mr.Puspendra yadav	श्री पुष्पेन्द्र यादव	Medi-Caps University, Indore, M.P.
32.	Mr. Akhil Kumar	श्री अखिल कुमार	Medi-Caps University, Indore, M.P.
33.	Ms. Anamika Agrawal	सुश्री अनामिका अग्रवाल	Medi-Caps University, Indore, M.P.
34.	Ms. Rupal Porwal	सुश्री रूपल पोरवाल	Medi-Caps University, Indore, M.P.
35.	Ms. Akanksh Sharma	सुश्री आकांक्षा शर्मा	Medi-Caps University, Indore, M.P.

The training program significantly enhanced participants' knowledge and practical understanding of innovative, energy-efficient, and disaster-resilient construction techniques. The sessions sparked keen interest among the students, who shared highly positive feedback and expressed a strong willingness to integrate the acquired insights into their academic and professional pursuits. The valedictory ceremony was graced by the esteemed presence of **Ar. S.K. Negi**, Chief Scientist, as the special guest. The program concluded on a successful note with a formal certificate distribution ceremony. Certificates were presented to all participants by **Ar. S.K. Negi**, **Sh. Nadeem Ahmad**, and **Dr. Tabish Alam**, acknowledging their active participation and commitment throughout the training.

