A Short-Term Program on

Bamboo Structural Design & Composite Product Development

MINISTRY OF DEVELOPMENT OF NORTH EASTERN REGION

North Eastern Council
Government of India

North Eastern Science and Technology Cluster

for promoting Research, Innovation & Skill Development









ABOUT NEST CLUSTER

NEST Cluster is an Initiative of the Ministry of Development of North Eastern Region (DoNER) through North Eastern Council (NEC) which will be implemented by IIT Guwahati. The cluster aims to promote Research, Innovation and Skill Development in the thematic areas of Semiconductor and Artificial intelligence, Grassroot Technologies, Bamboo-based Technology and Biodegradable Plastics. The cluster objective is to connect Academia, Industry, Research and Govt. agencies to empower the NER Youth and Women through Skill Development and Entrepreneurship. The cluster was launched in the month of Nov.,2025 in the august presence of Hon'ble Union Minister Shri. Jyotiraditya M. Scindia

ABOUT STP

This STP on Bamboo Structural Design and Composite Product Development covers bamboo morphology, physical and mechanical properties, species selection, grading, and treatment methods for structural and composite applications. Participants will learn load analysis, joint and connection design, and important standards and norms for bamboo structural design. Faculty and researchers will learn to create novel bamboo-based products and apply bamboo engineering principles to teaching, research, and entrepreneurship.

KEY TOPICS

- Structural Design using Bamboo
- Stress Analysis
- Use of Bamboo in Civil Structures
- Modelling using ABAQUS
- Bamboo / Timber in Civil Structures
- Bamboo in the Road and Transport Sectors
- Bamboo Composites: Design, Modelling & Manufacturing
- Bamboo and Composite Toys: Design & Development
- Exploration of New Product Opportunities
- Lab Visit and Demonstration
- Hands-On-Experience
- Entrepreneurship Opportunity

KEY SPEAKERS

- ❑ Prof. C. A. Korde, IIT Bombay
- ❑ Representative of NECBDC
- ❑ Representative of Assam State Bamboo Mission
- ❑ Prof. Nipal Deka, IIT Guwahati
- ❑ Prof. Supradip Das, IIT Guwahati
- ❑ Prof. Anjan Kumar S, IIT Guwahati
- ❑ Prof D. Chakraborty, IIT Guwahati
- ❑ Prof. Hemant B. Kaushik, IIT Guwahati
- ❑ Prof. Kishore Debnath, NIT Meghalaya
- ❑ Prof. Poonam Kumari, IIT Guwahati
- ❑ Prof. Ujendra Kumar Komal, IIT Guwahati
- ❑ Dr. Mridusamita Bora, Industry ADMECA Composite Pvt. Ltd.

IMPORTANT DATE & DETAILS

Last Date to apply for STP:
Jan. 13, 2026
Payment: Jan.19, 2026 (On-Site)
Intimation of Acceptance:
Jan. 13, 2026

https://forms.gle/M3CuTyRuVMa54p4k7

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