National Institute of Technical Teachers' Training and Research, Kolkata

Newsletter

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Message from the Director

Dear Readers,

Greetings!!

It is with immense pride and joy that I present *Volume-17, Issue No.2* of the NITTTR Kolkata Newsletter. This publication reflects not only the academic and professional engagements of the Institute but also the collective spirit of innovation, collaboration, and excellence that drives our mission. Each page of this edition stands as a testimony to the dedication and creativity of our faculty, staff, scholars, and students, who contribute to the Institute's vision of advancing technical education for national progress and global relevance.

In today's rapidly evolving educational landscape, the role of institutions like NITTTR Kolkata extends far beyond training and capacity building. We are entrusted with nurturing critical thinking, advancing pedagogical innovation, and developing frameworks that respond effectively to societal needs and technological advancements. Guided by this responsibility, the Institute continues to initiate programs, research, and partnerships that empower teachers, enhance student learning experiences, and strengthen the quality of technical education across the country.

This issue of the newsletter highlights a range of activities and achievements that underscore our vibrant institutional culture, whether in academic initiatives, faculty development, research pursuits, or outreach programs.

Key highlights of this issue include:

1. The successful hosting of the 1st International Conference on Green Technology & Sustainability (ICGTS 2025) and Global Climate Action: Strategies for a Sustainable Future (GCASSF 2025), which brought together global experts and led to high-impact research publications.
2. The Nalanda Central Library organized a one-day research workshop on "Excellence in Scholarly Writing and Publishing", promoting academic writing and research excellence among scholars and faculty.
3. The inauguration of a state-of-the-art Computational Civil Engineering Laboratory and the signing of a Memorandum of Understanding (MoU) with MIDAS Software, further strengthening academia–industry collaboration.

4. The training of over 1,800 technical teachers through 99 short-term training programmes across diverse domains, including pedagogy, management, and emerging technologies.

5. Various outreach and community initiatives—such as the National Sports Day Celebrations, Health Camp on Doctor's Day, and Hands-on Concrete Pavement Project-which reaffirm the Institute's holistic approach to education, sustainability, and social responsibility.

These endeavours, while diverse in nature, are united by a common purpose: to position NITTTR Kolkata as a centre of excellence where knowledge meets practice, and where innovation is aligned with inclusivity and sustainability.

As we look ahead, our focus remains on fostering a globally oriented, forward-looking educational ecosystem that not only meets current demands but also anticipates future challenges. I extend my sincere appreciation to all contributors who have enriched this issue with their efforts, and I hope that our readers find in these pages both inspiration and insight. Together, let us continue to build on the Institute's rich legacy and strengthen its role in shaping a brighter, more resilient future for technical education.

With best wishes,

Prof. V.M.S.R. Murthy
Director (Additional Charge)
NITTTR, Kolkata

ARTICLE

IDENTIFYING SKILLS AND KNOWLEDGE GAP THROUGH TRAINING NEED ANALYSIS (TNA): A CASE STUDY OF NITTTR-KOLKATA

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Introduction:

Training and Development (T&D) is one of the most important functions in Human Resource Management, aimed at improving employee performance and preparing them for future responsibilities. A key step in this process is Training Need Analysis (TNA). TNA identifies the gaps between current competencies and the competencies required for effective performance. It ensures that training programs are not based on assumptions, but on real needs, making them more effective and aligned with organizational goals.

Importance of Training & D for organization:

Training and development are crucial for organizations because they enhance employee skills, leading to increased productivity, higher quality products/services, and better adaptation to technological changes. These programs also improve employee morale, reduce turnover, help build future leaders, and ensure compliance with regulations, all of which contribute to the organization's growth, competitiveness, and long-term success.

- Maintains quality products / services
- Achieves high service standards
- Provides information for new comers
- Refreshes memory of old employees
- Achieves learning about new things; technology, products / service delivery
- Reduces mistakes - minimizing costs
- Opportunity for staff to feedback / suggest improvements
- Improves communication & relationships - better teamwork

Training Need Analysis (TNA):

Training Need Analysis (TNA) is a process used by organizations to identify the specific knowledge, skills and abilities (KSAs) that employees need to perform their jobs effectively and to meet organizational goals. It involves assessing current performance levels, identifying gaps, and determining the training required to bridge those gaps. Ultimately, TNA helps organizations align training programs with their strategic objectives, enhance employee performance, and drive business success.

The Training Needs Analysis Cycle:

The Training Needs Analysis (TNA) Cycle is a systematic process used by organizations to identify the gap between employees' current skills and the skills they need to perform their jobs effectively. It ensures that training programs are purposeful, cost-effective, and aligned with business goals. There are mainly six stages:

Stage 1 – Initiating the Needs Analysis

This stage begins the process by clarifying why a training needs analysis is required. The purpose, scope, and expected outcomes are defined, and key stakeholders are identified.

Stage 2 – Conducting Organizational Scan

Here, the organization's vision, mission, goals, and performance requirements are reviewed. This helps align training needs with overall business priorities.

Stage 3 – Focusing the Search

The focus shifts to specific departments, job roles, or performance areas that may require training. This avoids a broad, unfocused study and directs efforts where they are most needed.

Stage 4 – Collecting the Data

Information is gathered through surveys, interviews, observations, performance reviews, or assessments to understand employees' current skills, knowledge, and behaviour.

Stage 5 – Interpreting the Data

The collected data is analysed to identify skill gaps, training priorities, and root causes of performance issues. It also helps determine whether training is the right solution.

Stage 6 – Acting Upon the Data

Based on the findings, appropriate actions are taken—such as designing and implementing training programs, recommending non-training solutions, or making policy/structural changes.

Skills vs. Knowledge:

Skills are the ability to perform tasks or activities effectively and efficiently, often developed through practice. They are practical and require action, often developed through hands-on experience and training. Baking a cake, playing a musical instrument, coding software, or communicating effectively are a few examples. Applying knowledge, performing tasks, solving problems, and achieving desired outcomes are its primary focus.

Whereas, Knowledge on the other hand, is the understanding of facts, information, concepts, and theories acquired through education or experience. It is often theoretical and can be acquired through learning, reading, or listening. Knowing the capital of a country, the rules of a game, or the steps in a scientific process are a few examples. Understanding concepts, remembering facts, and grasping theoretical frameworks are its main focus.

Identifying Skill and Knowledge Gap:

Identifying skills and knowledge gaps involves a structured process of comparing an organization's strategic goals and the skills needed to achieve them against the existing capabilities of its workforce. Organizations use various methods to identify skill and knowledge gaps. The most common include employee surveys and feedback, which means to understand employees' own perception of their skill needs. Performance reviews are to identify gaps against set targets and standards. Skills assessments means testing current abilities against required competencies. Focus groups/interviews is gathering in-depth insights from employees.

A Sample Study of TNA at NITTTR, Kolkata:

The National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata (now deemed to be University) is one of the four premier institutes in India established to train primarily technical teachers, support educational innovation, and improve the quality of technical education across the country. It plays a vital role in building faculty capacity, developing curricula, and fostering research and consultancy for the advancement of technical and vocational education.

A TNA was conducted in National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata, among 25 employees, of which 21 responded to the survey based on the predesigned questionnaire. The findings are summarized below:

Job Satisfaction & Training Adequacy: 100% of respondents were satisfied with their current role. However, while 52% felt they had received adequate training, 48% indicated gaps in training for their present roles.

Resources: 81% reported that resources provided by the institute were adequate.

Training Interest: 71% expressed interest in attending training sessions, with 86% specifically emphasizing the need for soft skills training such as communication and time management.

Skills in Demand: The most requested training area was advanced technical skills (38%), followed by

managerial skills (19%), and rules and regulations (14%). Communication and accounts-related skills were also highlighted.
Knowledge Gaps: While 43% of employees felt they lacked no significant knowledge for their roles, others identified needs in areas such as administration, computer knowledge, English, accounts, and machinery maintenance.

Preferred Training Methods: A majority (62%) preferred on-the-job training in offline mode, while smaller groups opted for online or off-the-job methods.

Employees also suggested that TNAs should be conducted regularly, and feedback processes should be improved. Some respondents expressed the need for better management practices and the digitization of feedback tools.

TNA in Relation with T&D:

Training Needs Analysis (TNA) and Training & Development (T&D) go hand in hand when it comes to helping employees grow and organizations succeed. Think of TNA as a diagnostic check-up—it helps spot gaps in skills, knowledge, or performance.

T&D is the next step—it is the action plan that turns those insights into meaningful learning experiences. Together, they make sure training is focused, practical, and aligned with what the organization really needs.

TNA is not just about finding problems; it helps decide which gaps are most important to address first. It looks at the bigger picture—what the organization wants to achieve, what teams need, and what individuals need to perform at their best. T&D then takes over, designing training that fits those needs, whether through workshops, e-learning, or on-the-job guidance. It also keeps track of results, so learning actually sticks and can be applied in real work situations.

The best part is that TNA and T&D work in a continuous cycle. After training is delivered, TNA can check whether the gaps are closing, what new challenges are emerging, and how future learning can be improved. This way, training is not just a one-time event—it becomes a living process that grows with the organization and its people.

In short, TNA identifies the "what" and "why" of training, while T&D focuses on the "how" and "when." Together, they create a continuous learning loop that aligns employee development with organizational success.

Conclusion:

The TNA at NITTTR, Kolkata highlights that, while employees are largely satisfied with their roles and find institutional resources adequate, significant training gaps remain. The demand for advanced technical, managerial, and soft skills training reflects evolving workplace needs, with a preference for on-the-job, offline methods. Regular TNAs, improved feedback mechanisms, and better management practices will be essential to bridge knowledge gaps and ensure continuous employee development. Such type of analysis was not done at NITTTR-Kolkata before. For arranging training for employees of such organization training need assessment followed by training needs analysis is important and organization may consider such approach unlike other organizations.

In today's dynamic work environment, conducting Training Need Analysis is not just a procedural HR activity but also a strategic necessity. The NITTTR case study shows that while employee satisfaction is high, there remain clear gaps in technical and soft skills that must be addressed. By systematically identifying these gaps, organizations can create focused training programs that are efficient, impactful, and future-ready.
Training Need Analysis, therefore, is not a one-time exercise but an ongoing process that strengthens organizational performance and builds a culture of continuous learning.

References:

Books:

1. Training and Development: Theory and Applications (B. Janakiram)
2. Noe, R. A. (2020). Employee Training and Development (8th ed.). McGraw-Hill Education.

Journals:

1. Journal of European Industrial Training, Vol. 18 No. 3 (Geoff Anderson)
2. Kaufman, R. A., & Valentine, G. (1999). Relating needs assessment and needs analysis: Clarifying the differences. Journal: Performance Improvement, 38(5), 5–7.
3. McGhee, W., & Thayer, P. W. (1961). Training Needs: A Review and Integration of the Literature.
4. Brown, J. (2002). Training Needs Assessment: A Must for Developing an Effective Training Program. Public Personnel Management, 31(4), 569–578.

Websites:

5. The Academic: International Journal of Multidisciplinary Research www.theacademic.in
6. ILO-International Labour Organization (UN) https://www.ilo.org
7. MindTools: Training Needs Assessment: https://www.mindtools.com

Conference / Seminar:

Report on 1st International Conference on Green Technology & Sustainability (ICGTS 2025)

The 1st International Conference on Green Technology & Sustainability (ICGTS 2025), organized by the Department of Civil Engineering, NITTTR Kolkata, from May 29-30, 2025, achieved remarkable success within a short time frame of just 2.5 months. The event, which brought together over 120 participants, was inaugurated by Prof. Debi Prasad Mishra, Director of NITTTR Kolkata, and Mr. Mehrul Kirit Parikh, President of DFI.

A major highlight of ICGTS 2025 was the presentation of research papers, which will be published in prestigious journals such as Environmental Sustainability (Springer, IF 3.3, SCI), Materials Circular Economy (Springer), and others. The conference attracted a distinguished lineup of speakers, including experts from Old Dominion University (USA), CQ University (Australia), Xian Jiaotong-Liverpool University (China), Anna University, and Central University Lucknow.

The event was successfully conceptualized and executed under the leadership of Prof. Naveen B. P., along with Prof. Kunwar Raghvendra Singh and Prof. Mithu Dey. Prof. Naveen played a key role in securing ₹3 lakh in sponsorship, which ensured the smooth running of the event. The conference also showcased the active involvement of M. Tech students from the Department of Civil Engineering, whose support was vital in the efficient organization and execution of the conference, reflecting NITTTR Kolkata's commitment to student engagement in professional academic events.

International Conference GCASSF-2025: A Landmark International Conference for Climate Action

The International Conference on Global Climate Action (GCASSF-2025) by Department of Technical Education and Management at NITTTR Kolkata was a powerful catalyst for change. This two-day event moved beyond dialogue to forge a clear path for a sustainable future. Day 1 ignited under NITTTR Kolkata's leadership, setting an action-first tone for climate impact. Director (additional charge) Prof. V. M. S. R. Murthy set the foundation for the programme with Chief Guest Prof. Gautam Sutradhar (NIT Jamshedpur).

The conference ignited with a landmark agreement for MoU with Solar Energy Society ofIndia for green energy and impactful keynotes from experts like Er. Prafulla Pathak. Day two featured deep dives into critical solutions like Waste-to-Energy by Prof Virendra Kumar Vijay, Chair Professor, IIT Dephi and the preservation of Himalayan glaciers by Prof Atul Aditya

Pandey, Department of Geological Sciences, Patna University.

The outcomes were tangible comprising 45+ research papers, awards, and actionable strategies for de-carbonization, resilient cities, and climate finance, powered by AI and technology.

The closing call from Shri Rakesh Ranjan was clear- accelerate renewables, empower utilities, and commit to a time-bound action roadmap now. The message is set; the time for action is here.

Workshop on PSC I-Girder Bridge Design Hosted by NITTTR Kolkata and MIDAS

On 28th June 2025, Prof. Naveen B.P. Prof. & HoD, CE, NITTTR, Kolkata successfully organized a joint workshop with MIDAS on *"PSC I-Girder Bridge Design using Midas Civil."* The workshop, designed for civil engineering faculty, students (undergraduate, postgraduate, and diploma), research scholars, and bridge engineering professionals, offered hands-on training in designing and analyzing pre-stressed concrete (PSC) I-girder bridges using Midas Civil software.

Inaugurated by Prof. Gayadhar Panda, DFAA, the event saw over 80 participants and was widely praised for its technical depth, practical relevance, and skill-oriented approach. The workshop showcased Prof. Naveen's efforts in bridging academia with industry standards, providing participants with essential tools and knowledge for advancing in the field of bridge engineering.

Report on 'National Sports Day 2025' at NITTTR Kolkata

National Sports Day is celebrated annually on August 29 to commemorate the birth anniversary of Major Dhyan Chand, India's greatest sporting legend. Known popularly as 'The Wizard of Hockey,' he is remembered for his many contributions to the Indian sport. This year the National Sports Day is planned as a pan-India movement to make India embrace sport by mobilising people across the country and across age-groups to actively participate in at least one sport. NSD 2025 makes a special tribute to the Olympic and Paralympic Spirit and integrate the three core values of Excellence, Friendship, Respect, Courage, Determination, Inspiration and Equality in our sports eco-system. This year, NSD Celebrations have the tagline 'Ek ghanta khel ke maidaan mein' (एक घंटा खेल के मैदान में!!)

As per the directive from Dr.Sunita Siwach, Joint Secretary, UGC (DO No. 8-I/2024(Misc.) dated 20th August, 2025), NITTTR K (DU), celebrated National Sports Day on 29th August 2025, marking the birth anniversary of Hockey legend Major Dhyan Chand. As per the instructions, it was celebrated for three days, from 29th to 31st August 2025. The programmes were convened and coordinated by Dr. Rayapati Subbarao,

Associate Professor, NITTTR, Kolkata of Mechanical Engineering Department. Hoardings were placed in the campus, showcasing the necessity of sports.

Date-wise Activities

Day 1 – Pledge, Morning excericse and sports

On 29th August -Tribute to Major Dhyan Chand in morning assembly (7:30 AM) at Chanakya Bhawan as shown. Fit India Pledge was taken by the Faculty, staff and students in both Hindi and English. Later, 60 minutes of morning exercise was done. (8 AM - 9 AM). Dr. Rayapati Subabrao, the coordinator briefly shared the values of Olympics and Paralympics. The program ended with physical exercises by the students, staff and faculty. The pictures of the same are given in Fig. 1. Badminton (singles and doubles) was played by the students enthusiastically on Day 1. The pictures of the same are given in Fig. 2. Dr. Subbarao and Dr. N. K. Mandal officiated the matches. Girls and boys showed interest to continue the sports activities throughout the year.

Day 2 - College-level sport debates

All the students, staff and faculty gathered in Seminar Hall, 1st floor of Ishwar Chandra Vidyasagar Bhavan and shared their valuable experiences of their day-to-day life to be fit and how we can achieve 'Fit India'. Earlier, students took pledge in Hindi and English to formally start Day 2. Later, Dr. Rayapati Subabrao took forward the discussion, by detailing the need of sports in our daily activities. Students shared their valuable practices to balance studies and life.

Day 3 - Bicycle Rally

Pan-India participation of the citizens on Cycle was scheduled for the 3rd day. The '***Bicycle Rally'*** at NITTTR Kolkata was conducted from Chanakya Bhavan to Welding Centre and returning to Chanakya Bhavan in the same route. Due to the weather conditions, only few staff, students and faculty could participate in the event. The pictures of the same are given in Fig. 3.

As per the directive from the UGC, all the pictures are uploaded to the website and certificate I obtained, as shown in Fig. 4.

Fig. 1. Pledge and Morning excericse on 29th August 2025 (Day 1).

Fig. 2. *Badminton singles and doubles for students on Day 1.*

Fig. 3. *Bicycle rally on Day 3.*

Fig. 4. *Certficate to the insistute.*

Invited Talk

By Dr. Kinsuk Giri

1. "Introduction to Data Science", **AICTE ATAL FDP on Data Science**, *July 28, 2025, BCREC, Durgapur, India*

2. "Engineering Aspects of Error Analysis", **Induction Program Programme for New Students at IEM**, *July 9, 2025, IEM, Kolkata, India*

3. "PYTHON in Research", **Five-Day Faculty Development Programme on Innovative Writing and Advance ICT Tools Usage For Research**, *June 23, 2025, IQAC, BCET, Balasore, India*

4. "Introduction to Modern Academia and Foundation of Research", **Five-Day Faculty Development Programme on Innovative Writing and Advance ICT Tools Usage For Research**, *June 23, 2025, IQAC, BCET, Balasore, India*

5. "Open Source Resources, SWAYAM, and MOOCs", **One-Day Faculty Training Program on ICT Tools, MOOCs, SWAYAM & OER**, *May 17, 2025, Internal Quality Assurance Cell (IQAC), Malda College, Malda, India*

By Prof. Naveen B.P.

1. Prof. Naveen B.P. delivered an insightful talk on "Green Schools: Sustainable Practices in Education" to the students of Kendriya Vidyalaya as part of the PM SHRI (PM Schools for Rising India) initiative on 21st July 2025. The session aimed to educate the school community about eco-friendly practices, sustainable technologies, and innovative initiatives that can be adopted within school environments.

By Prof. Niladri Pratap Maity

1. **Prof. Niladri Pratap Maity** delivered two talks on **"Higher Education and Society"** organized by UGC-Malaviya Mission Teacher Training Centre (MMTTC), Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.) on 10.07.2025

2. **Prof. Niladri Pratap Maity** delivered two talks on **"NEP 2020: Higher Education"** organized by UGC-Malaviya Mission Teacher Training Centre (MMTTC), Mizoram University (A Central University), Aizawl on 10.06.2025

3. **Prof. Niladri Pratap Maity** delivered two talks on **"Semiconductor: Prospects in India"** organized by UGC-Malaviya Mission Teacher Training Centre (MMTTC), Mizoram University (A Central University), Aizawl on 16.06.2025

Faculty Development Programmes (FDPs)

Teachers' Training During the period of May - August 2025: 1828 numbers of Technical Teachers have been trained, through various Short-Term Training Programmes, broadly in the areas of Content Updating, Management, Pedagogy and Professional Skill Development. A total of 99 training programs were conducted for the Teachers and Technicians of different Polytechnic colleges and Engineering colleges all over the Country during the 2nd Quarter of the Year 2025.

List of Training Programmes (January-April, 2025)

Sl. No.	Programme Code	Programme Title	Programme Coordinator	From	To
1.	PS10C	Pedagogical practices for Teaching-Learning under OBE	Urmila Kar	28/04/2025	02/05/2025
2.	CU08C	Power Electronics & Its Applications in Sustainable Energy Sector	Gayadhar Panda	28/04/2025	02/05/2025
3.	PS11A	Advanced Pedagogy	Sagarika Pal	28/04/2025	09/05/2025
4.	CU19C	Application of MATLAB in Electrical Engineering	Soumitra Kumar Mandal	28/04/2025	09/05/2025
5.	PS12C	Laboratory Safety Management	Subrata Mondal	28/04/2025	09/05/2025
6.	CU20B	Machine Learning With Engineering Application	Chandan Chakraborty	05/05/2025	09/05/2025
7.	CU23C	Laoratory practice on building material & NDT	Mithu Dey	05/05/2025	09/05/2025
8.	CU24C	Overview of Green Manufacturing	Nirmal Kumar Mandal	05/05/2025	09/05/2025
9.	CU25C	Geotechnical Investigation Field and Laboratory Testing	Naveen BP	05/05/2025	09/05/2025
10.	SPL10C	Research Ethics and Publication Procedure	Niladri Pratap Maity	05/05/2025	09/05/2025
11.	SPL(IHP-Mayurbhanj)	Outcome Based Education & Bloom's Taxonomy	R S Rao	05/05/2025	07/05/2025
12.	CU14B	Non-Conventional Energy	Subrata Chattopadhyay	05/05/2025	09/05/2025

13.	CU27C	Cyber Security	Rajeev Chatterjee	13/05/2025	17/05/2025
14.	CU28C	Waste Management – Benefits and Importance	Sailendra Nath Mandal	12/05/2025	23/05/2025
15.	CU29C	Sustainable Energy & Environment	Gayadhar Panda	19/05/2025	23/05/2025
16.	CU26C	Semiconductor: Devices, Applications and Prospects	Niladri Pratap Maity	19/05/2025	23/05/2025
17.	PS13C	Professional Values, Ethics	Mithu Dey	19/05/2025	23/05/2025
18.	PS14C	Entrepreneurship Development	Subrata Mondal	19/05/2025	23/05/2025
19.	PS15C	Effective Teaching	Urmila Kar	26/05/2025	30/05/2025
20.	CU36C	Fundamentals to Image Processing	Indrajit Saha	26/05/2025	30/05/2025
21.	CU132C	Power Quality Assessment and mitigation in Distribution Network	Papia Ray	26/05/2025	30/05/2025
22.	CU37B	Bio-Medical Instrumentation	Subrata Chattopadhyay	26/05/2025	30/05/2025
23.	CU38C	Air Pollution Control and Management	Kunwar R Singh and Anil Kumar	26/05/2025	30/05/2025
24.	CU41C	Word Processing with LaTeX	Kinsuk Giri	26/05/2025	30/05/2025
25.	CU40C	MATLAB Application in Control System, Electrical & Electronics Circuits Analysis	Soumitra Kumar Mandal	26/05/2025	06/06/2025
26.	SPL(IHP-Namsai)	NBA and SAR Preparation	Rayapati Subbarao	02/06/2025	06/06/2025
27.	CU43A	Introduction to UN Sustainable Development Goals	Subrata Mondal	02/06/2025	06/06/2025
28.	CU123A	Application of AI/ML for Engineers	K Venkata Rao and MS Jagadeesh	09/06/2025	21/06/2025
29.	CU45C	Environmental Management	Anil Kumar and Kunwar Raghvendra Singh	09/06/2025	13/06/2025
30.	CU47C	Introduction to Data Science	Indrajit Saha	09/06/2025	13/06/2025
31.	CU49A	Industrial Automation	Subrata Chattopadhyay	09/06/2025	20/06/2025
32.	CU50A	Sustainable Waste and Wastewater Engineering	Kunwar R Singh and Anil Kumar	09/06/2025	20/06/2025
33.	PS17C	NBA Accreditation and SAR Preparation for Engineering Colleges and Polytechnics	Arpan Kumar Mondal	16/06/2025	20/06/2025
34.	CU51C	Air, Water, Noise Pollution and Human Health	Sailendra Nath Mandal	16/06/2025	20/06/2025
35.	SPL(IHP-GCECT)	Pedagogical practices for Teaching-Learning under OBE	Urmila Kar	16/06/2025	20/06/2025
36.	SPL11B-Student	Communication Skill development	Habiba Hussain	16/06/2025	18/06/2025
37.	PS18C	NBA Accreditation and SAR Preparation	Rayapati Subbarao	16/06/2025	20/06/2025
38.	CU54C	Artificial Intelligence Application in Electrical Engineering	Soumitra Kumar Mandal	16/06/2025	20/06/2025
39.	CU55B	Functional Textiles and Protections	Subrata Mondal	16/06/2025	20/06/2025
40.	CU137C	Word Processing with LaTeX	Kinsuk Giri	16/06/2025	20/06/2025
41.	CU52C	Data Science in Engineering	Nirmal Kumar Mandal	23/06/2025	27/06/2025
42.	SPL(IHP-GIET)	Cyber Security	Rajeev Chatterjee	23/06/2025	27/06/2025
43.	CU10C	Disaster Risk Resilience	Anil Kumar and Kunwar Raghvendra Singh	23/06/2025	27/06/2025
44.	CU118C	Renewable Energy System and its efficient utilization	Papia Ray	23/06/2025	27/06/2025
45.	PS19C	Induction Training	Habiba Hussain	23/06/2025	04/07/2025
46.	CU57C	Air, Water, Noise Pollution and Human Health	Sailendra Nath Mandal	30/06/2025	04/07/2025
47.	CU58B	Additive Manufacturing of Polymers for Biomedical Applications	Subrata Mondal	30/06/2025	04/07/2025
48.	PS21B	NEP 2020: Implementation strategy in Higher Educational Institutes	Urmila Kar	30/06/2025	04/07/2025
49.	PS22C	NBA Accreditation and SAR preparation	Rayapati Subbarao	30/06/2025	11/07/2025
50.	CU59C	Water Security	Anil Kumar and Kunwar R Singh	07/07/2025	11/07/2025
51.	CU60C	PYTHON Programming	Kinsuk Giri	07/07/2025	11/07/2025
52.	CU124B	Steps to write a thesis and research article	K Venkata Rao	07/07/2025	11/07/2025
53.	CU119C	Application of meta-heuristic techniques in smart power system operation, control and protection	Papia Ray	07/07/2025	11/07/2025
54.	CU44C	Industrial Drive & EV Systems	Gayadhar Panda	07/07/2025	11/07/2025
55.	CU128C	Python Programming	Jagadeesh M S	07/07/2025	11/07/2025
56.	CU62B	Sensing in Industrial Automation	Subrata Chattopadhyay	07/07/2025	11/07/2025
57.	CU63C	ANN and Fuzzy Logic Control in Electrical Engineering	Soumitra Kumar Mandal	07/07/2025	11/07/2025
58.	CU64A	Fundamental and Applications of Nanomaterials	Subrata Mondal	07/07/2025	11/07/2025
59.	PS23A	Advanced Pedagogy	Nirmal Kumar Mandal	07/07/2025	18/07/2025
60.	PS24B	Advanced teaching for modern teachers	Mithu Dey	07/07/2025	18/07/2025

61.	PS03C	Induction Training	Arpan Kumar Mondal and Sukanta Kumar Naskar	07/07/2025	18/07/2025
62.	PS25C	Approaches In Developing Curriculum	Sukanta Kumar Naskar	14/07/2025	18/07/2025
63.	PS26C	Soft Skills for 21st century academics	Habiba Hussain	14/07/2025	18/07/2025
64.	CU67B	Modelling with AUTOCAD and SOLIDWORKS	Nirmal Kumar Mandal	14/07/2025	18/07/2025
65.	CU69C	Digital Logic with CMOS IC Design	Niladri Pratap Maity	14/07/2025	18/07/2025
66.	PS27C	Outcome Based Accreditation and NBA	Urmila Kar	14/07/2025	18/07/2025
67.	PS29C	Effective Teaching and Research	Indrajit Saha	21/07/2025	25/07/2025
68.	CU120C	Design and development of Distributed Power Generation System and micro grid	Papia Ray	21/07/2025	25/07/2025
69.	PS43C	Technical Paper and Thesis Writing Using Latex	Jagadeesh M S	21/07/2025	25/07/2025
70.	CU125C	Advanced Manufacturing Processes	K Venkata Rao	21/07/2025	25/07/2025
71.	CU72C	Integrated Circuit Design	Niladri Pratap Maity	21/07/2025	25/07/2025
72.	CU75C	Environmental Pollution and Climate Change	Sailendra Nath Mandal	21/07/2025	25/07/2025
73.	CU76B	Polymer Composites and Nanocomposites	Subrata Mondal	21/07/2025	25/07/2025
74.	SPL-IHP-Rampurhat	Institutional Management and Administrative Procedure	Sukanta Kumar Naskar and Arpan Kumar Mondal	21/07/2025	01/08/2025
75.	SPL17A-ITP	Sustainable Development Towards a Greener Future	Gayadhar Panda and Kunwar R Singh	21/07/2025	01/08/2025
76.	SPL(IHP-IMU)	Communication Skill Development	Habiba Hussain	28/07/2025	30/07/2025
77.	MGT04C	Managerial Skills for Technical Teachers and staff	Sukanta Kumar Naskar	28/07/2025	01/08/2025
78.	CU93C	Renewable Energy and Electric Vehicles (EV) Integration	Gayadhar Panda	28/07/2025	01/08/2025
79.	CU39C	LABVIEW and IoT Applications	Sagarika Pal	04/08/2025	08/08/2025
80.	CU126B	Robotics	K Venkata Rao	04/08/2025	08/08/2025
81.	CU129C	Machine Learning With Python	Jagadeesh M S	04/08/2025	08/08/2025
82.	MGT03C	Leadership & People management skills	Habiba Hussain	04/08/2025	08/08/2025
83.	PS32A	Research Methodology	Niladri Pratap Maity	04/08/2025	08/08/2025
84.	CU88C	Industrial Electronics and Electric Vehicle	Soumitra Kumar Mandal	04/08/2025	08/08/2025
85.	CU89B	Advanced Materials Science and Engineering	Subrata Mondal	04/08/2025	08/08/2025
86.	CU90C	Environmental Impact Assessment and Climate Resilience	Kunwar R Singh and Anil Kumar	04/08/2025	08/08/2025
87.	SPL25C	Renewable Energy and Electric Vehicles (EV) Integration	Gayadhar Panda	05/08/2025	09/08/2025
88.	PS33A	Advanced Pedagogy	Sukanta Kumar Naskar and Arpan Kr. Mondal	04/08/2025	15/08/2025
89.	CU91C	R Programming	Kinsuk Giri	11/08/2025	15/08/2025
90.	CU94C	Engineering Pedagogy	Nirmal Kumar Mandal	18/08/2025	22/08/2025
91.	CU121C	Power Generation Transmission and Distribution system	Papia Ray	18/08/2025	22/08/2025
92.	CU98C	Sustainable Industrial Engineering Practices	Deepak Mehra	18/08/2025	22/08/2025
93.	CU99C	VLSI Design	Niladri Pratap Maity	18/08/2025	29/08/2025
94.	PS35C	Induction Training	Urmila Kar	18/08/2025	29/08/2025
95.	CU100C	Introduction to Data Security	Indrajit Saha	25/08/2025	29/08/2025
96.	CU101C	Engineering Laboratory Management	Sagarika Pal	25/08/2025	29/08/2025
97.	CU135B	Smart Robotics: Arduino & IoT for Mechanical Innovators	Saurabh Kumar Yadav	25/08/2025	29/08/2025
98.	PS42C	AI based Pedagogy	K Venkata Rao	25/08/2025	30/08/2025
99.	PS36C	Entrepreneurship Development	Subrata Mondal	25/08/2025	29/08/2025

Publications

JOURNAL

- P. Dubey, **Kunwar Raghvendra Singh** and S. K. Goyal, "Assessment of Road Traffic Noise and Associated Health Complaints-Analysis Through Structural Equation Model", International Journal of Integrated Engineering. Vol. 17, No. 5. Published online: August 2025.
- Mohit Verma, **Kunwar Raghvendra Singh**, Nakul Gupta, Abdullah Faiz Al Asmari, Rajesh Goyal, Parveen Berwal, Saiful Islam, "Harnessing Agricultural Residues for Eco-Efficient Cement Substitution in Mortar: A Pathway to Low-Carbon and Sustainable Construction", Journal Name: Rocznik Ochrona Środowiska, Vol 27, Published online: August 2025, DOI: https://doi.org/10.54740/ros.2025.032
- S. Nandkeolyar, P. K. Ray, P. S. Puhan, **G. Panda** and R. Panda, "A Machine Learning-Based Hybrid Deep

Neural Network Approach for Adaptive Demand Side Management Using Community-Level Battery Storage Systems," in *IEEE Transactions on Industry Applications*, vol. 61, no. 5, pp. 7609-7619, Sept.-Oct. 2025, doi: 10.1109/TIA.2025.3567409. **06 May 2025**

- **Niladri Pratap Maity et. al.,** "Architectural design of sequential circuit based on improved diode-free adiabatic logic," ***Analog Integrated Circuits and Signal Processing (Springer),*** vol. 124, Article No. 71, https://doi.org/10.1007/s10470-025-02463-4
- **Niladri Pratap Maity et. al.,** "Investigation of Multi-Material Barrier GaN-based High Electron Mobility Transistors with Double-Deck Gate Field Plate", ***Semiconductors (Springer),*** vol. 59, pp. 773-786, 2025, https://doi.org/10.1134/S1063782625600731
- **Niladri Pratap Maity et. al.,** "Verification & Efficient Implementation of RCM based watermarking using HLS Approach", ***IEEE INDISCON 2025 (IEEE Explore)***.
- **Mehra, D.** et al. Sustainable Nanotechnology for the Green Environment. International Journal of Environmental Sciences, 11(14s), p.2025.

CONFERENCE

1. M. Kumar, K. P. Panda, R. T. Naayagi, R. Thakur and **G. Panda**, "Design and Analysis of a Non-Isolated High Step-Up DC–DC Converter for Hydrogen Fuel Cell Electric Vehicles," *2025 7th International Conference on Energy, Power and Environment (ICEPE)*, Sohra (Cherrapunjee), India, 2025, pp. 1-5, doi: 10.1109/ICEPE65965.2025.11139691. **Date of Publication: 05 September 2025**
2. L. Z. Rui, R. T. Naayagi and **G. Panda**, "Fault Detection and Diagnosis in Power Systems Using Machine Learning," *2025 9th International Conference on Green Energy and Applications (ICGEA)*, Singapore, Singapore, 2025, pp. 1-6, doi: 10.1109/ICGEA64602.2025.11009801. **Date of Publication: 28 May 2025**
3. S. B. Shaowdin, **G. Panda** and R. T. Naayagi, "Smart DC Nanogrid Control for Rural Electrification," *2025 9th International Conference on Green Energy and Applications (ICGEA)*, Singapore, Singapore, 2025, pp. 1-7, doi: 10.1109/ICGEA64602.2025.11009772. **28 May 2025**
4. Kriti Vaid, Anil Soharu & **Naveen BP** (2025)., "Optimization Of Sand Battery Systems for Renewable Energy Storage Using Artificial Neural Networks", "1st International Conference on Green Technology & Sustainability (ICGTS 2025)". NITTTR Kolkata, May 29-30, 2025.vol.1, pp. 12.
5. Manish S Dharek, R S Gowda, **Naveen B.P** & Shivaraj Nayak., "Self-Purification Characteristics of Pervious Concrete- A Step towards Sustainability", "1st International Conference on Green Technology & Sustainability (ICGTS 2025)". NITTTR Kolkata, May 29-30, 2025.vol.1, pp. 79.
6. Vaibhav Sharma, Piyush Gupta & **Naveen B.P.**, "Spatial Assessment of Groundwater Quality in Bandhwari Region with Human Health Risk Evaluation", "1st International Conference on Green Technology & Sustainability (ICGTS 2025)". NITTTR Kolkata, May 29-30, 2025.vol.1, pp. 88.

Paper Presented in International Conference ICGTS 2025:

1. Atul Soni, **Kunwar Raghvendra Singh** & Deepak Kumar Tiwari, "Correspondence Analysis of Factors Influencing the Choice of Electric Vehicles Over Conventional Vehicles"

2. Mohit Verma, **Kunwar Raghvendra Singh**, "Long-Term Mechanical Performance of Eco-Friendly Concrete with Bamboo Fiber"

3. Deepak Kumar Tiwari, **Kunwar Raghvendra Singh** & D P Mishra, "Water Level Prediction using Long Short-Term Memory Neural Network Model for Hoshangabad Station India, A Case Study on Narmada River Basin"

4. Supria Saha, Arnab Maitra & **Kunwar Raghvendra Singh**, "Strategic Selection of Waste Materials for Production of Green Concrete Using VIKOR: An MCDM Approach Towards Sustainable Development"

5. Abhijit Maity, Yarramala Hadasa Joshna & **Kunwar Raghvendra Singh**, "Comparative Life Cycle Assessment of High-Performance Concrete Mixes Incorporating Silica Fume, Nano Silica, Fly Ash, and Waste Tea Powder Ash"
6. Madhubanti Sarkar, Rohan Saha, Subhadip Pahari & **Kunwar Raghvendra Singh**, "A Multi – Criteria Decision Making Method for Assessment of Waste Materials in Concrete Production Using Fuzzy Electre"

Paper Presented in International Conference GCASSF 2025

7. Chitrita Barman, Abhijit Maity, **Dr. Kunwar Raghavendra Singh**, "Integrating Climate Resilience into Structural Design of Urban Infrastructure"
8. Satyam Roy, **Dr. Kunwar Raghvendra Singh**, "Comparative Life Cycle Assessment of Concrete and Bituminous Pavements Using Waste Based Materials in India"

9. Supria Saha, **Dr. Kunwar Raghvendra Singh,** Dr. Anil Kumar, "A Hybrid Multi – Criteria Decision - Making Framework integrating Climate Change Adaptation and Mitigation for Green Building Decision Support"
10. Debanjali Hazra, **Dr. Kunwar Raghvendra Singh,** Dr. Anil Kumar, "Bridging Climate Science and Governance for Heat –Resilient Urban Design", (Received Best Paper Award)
11. Subhadip Pahari, **Dr. Kunwar Raghvendra Singh**, "3D Concrete Printing with Lightweight Fly Ash Aggregates"
12. Rahul Deo Barman, Chitrita Barman, **Dr. Kunwar Raghvendra Singh**, "Comparative Analysis of Sugarcane Fibre and Glass Fibre Composite Materials for Climate Change Resilience and Sustainability"

Conference papers by Dr. Rayapati Subbarao:

1) Rayapati Subbarao, 'Viability of alternative fuels in transportation for sustainable future', **ICGTS-50,** International Conference On Green Technology & Sustainability (ICGTS 2025), NITTTR Kolkata, May 2025.
2) Rayapati Subbarao, Trisha Biswanghri and Sukanta Kumar Naskar, 'Determination of appropriate sample size for the ranking of technical institutes in a region to ensure more sustainability',**ICGTS-82,** International Conference On Green Technology & Sustainability (ICGTS 2025), NITTTR Kolkata, May 2025.
3) Suvosree Ghosh and Rayapati Subbarao, 'Experimental studies on the overheating and sudden ceasing of the diesel engine for sustainability', **ICGTS-83**, International Conference On Green Technology & Sustainability (ICGTS 2025), NITTTR Kolkata, May 2025.
4) Nityanando Mahato and Rayapati Subbarao, 'Performance of titanium alloys in gas turbines: a sustainable approach to heat transfer and material integrity', **ICGTS-48,** International Conference On Green Technology & Sustainability (ICGTS 2025), NITTTR Kolkata, May 2025.
5) Rayapati Subbarao, 'Computational analysis on the shear strain scenario in case of a counter rotating turbine stage', **GCASSF2025_RS_01**, International Conference On Global Climate Action: Strategies for a Sustainable Future (GCASSF 2025), NITTTR Kolkata, Aug 2025.
6) Rayapati Subbarao and Bitan Das, 'Studies on the scenario of particulate matter emissions in Kolkata region', **GCASSF2025_BD**, International Conference On Global Climate Action: Strategies for a Sustainable Future (GCASSF 2025), NITTTR Kolkata, Aug 2025.
7) Rayapati Subbarao and Sukanta Kumar Naskar, 'Selection of appropriate parameters for ranking the technical institutes offering energy engineering programs', **GCASSF2025_RS_02**, International Conference On Global Climate Action: Strategies for a Sustainable Future (GCASSF 2025), NITTTR Kolkata, Aug 2025.
8) Rayapati Subbarao and Diptorshi Bandopadhyay, Effect of bending angles and working fluids in bend pipes for engineering applications aiming sustainability', **GCASSF2025_DB**, International Conference On Global Climate Action: Strategies for a Sustainable Future (GCASSF 2025), NITTTR Kolkata, Aug 2025.
9) Sayon Dey and Rayapati Subbarao, Use of Friction Stir Welding for Sustainable Engineering Solutions in Automobile Applications, **GCASSF2025_SD_T1**, International Conference On Global Climate Action: Strategies for a Sustainable Future (GCASSF 2025), NITTTR Kolkata, Aug 2025.

Conference papers by Dr. Deepak Mehra

1. Mehra, D. et al. "Green and Sustainable Supply Chain Management in the Fashion Industry: Trends, Barriers, Innovations, and Strategic Pathways for Future Transformation." *GCASSF-2025*.
2. Mehra, D. et al. "Consumer Purchasing Behaviour Towards Sustainable Fashion Apparel." *GCASSF-2025*.
3. Mehra, D. et al. "Role of Instagram in Promotion of Gopalpur Cluster." *GCASSF-2025*.
4. Mehra, D. et al. "Development and Evaluation of a Hybrid CNN-BiLSTM Model for Weather Prediction in India: A Novel Approach to Climate Forecasting." *GCASSF-2025*.
5. Mehra, D. et al. "Climate Change and Water Security in Bihar: A Comprehensive Analysis." *GCASSF-2025*.
6. Mehra, D. et al. "Sustainable Energy Transitions for Viksit Bharat 2047: Innovation Pathways, Policy Frameworks, and Roadmaps Toward a Carbon-Neutral Future." *GCASSF-2025*.

Book Published

Dr. Anil Kumar, Professor of Practice, NITTTR, Kolkata published a Book on **Green Technology (Climate and Innovation)** in June, 2025, **Khanna Book Publishing Co. (P) Ltd under Indian Society of Technical Education (ISTE) – WPLP Learning Material Series forwarded by Member Secretary, AICTE**. *The Book* is a clear, accessible guide to tackling climate change - linking science, policy, and India's leadership. It explains the climate system and human impacts, demystifies radiative forcing, RCPs/SSPs, and reviews global

accords from Kyoto to Paris and COP26. The book showcases clean technologies across energy, water, agriculture, and transport, and ties sustainability to **Atmanirbhar Bharat**. It closes with a call for collective action to build a resilient, low-carbon future.

Miscellaneous

Dr. Deepak Mehra

- Served as **Co-convener** of the International Conference on Global Climate Action: Strategies for a Sustainable Future (GCASSF-2025).
- Acted as a **Panellist** in Panel Discussion – 02 at the 1st International Conference on Energy, Environment, and Green Technology (ICEEGT-2025), organized by the Department of Electrical Engineering, NITTTR Kolkata.
- Served as a **Session Chair** at the International Conference on Global Climate Action: Strategies for a Sustainable Future (GCASSF-2025).
- Served as a **Session Chair** at the 1st International Conference on Energy, Environment, and Green Technology (ICEEGT-2025), organized by the Department of Electrical Engineering, NITTTR Kolkata.
- Served as a **Session Chair** at the 1st International Conference on Green Technology & Sustainability (ICGTS-2025), organized by the Department of Civil Engineering, NITTTR Kolkata (29–30 May 2025).

Dr. Kunwar Raghvendra Singh

- Dr. Kunwar Raghvendra Singh acted as a Convenor in the 1st International Conference on Green Technology & Sustainability (ICGTS 2025) organized by the Department of Civil Engineering, NITTTR Kolkata on 29th & 30th May 2025.
- Dr. Kunwar Raghvendra Singh acted as **Session Chair** during the 1st International Conference on Green Technology & Sustainability (ICGTS 2025) organized by the Department of Civil Engineering, NITTTR Kolkata on 29th & 30th May 2025.
- Dr. Kunwar Raghvendra Singh acted as **Session Chair** during the 5th International Conference on Waste Management (Recycle 2025) organized by the IIT Guwahati, on 5th & 6th June 2025.
- Dr. Kunwar Raghvendra Singh acted as **Member** of **Organising Committee –** 1st International Conference on Global Climate Action: Strategies for a Sustainable Future (GCASSF 2025) organized by the Department of Technical Education and Management, NITTTR Kolkata on 28-29 August 2025.
- Dr. Kunwar Raghvendra Singh acted as **Session Chair** during the International Conference on Global Climate Action: Strategies for a Sustainable Future (GCASSF 2025) organized by the Department of Technical Education and Management, NITTTR Kolkata on 28-29 August 2025.
- Dr. Kunwar Raghvendra Singh acted as **Technical Committee Member** for the International Conference on Urban Built Environment (ICUBE-2026) scheduled to be held on 27–28 March 2026 at NICMAR, Delhi-NCR Campus.
- **Dr. Kunwar Raghvendra Singh** Conducted sessions on 21 and 22 August 2025 for Newly Appointed Assistant Architect Batch (BCD), Govt. Of Bihar at Bihar Institute of Public Administration and Rural Development (BIPARD), Gaya (Bihar).
- **Dr. Kunwar Raghvendra Singh** attended MIDAS Gen Seminar and Hands-On Workshop on "Analysis and Design of Analysis and Design of a RC Building with Substructure" organized by NITTTR Kolkata, Saturday, 09th August, 2025.

Prof. Anil Kumar

- **Prof. Anil Kumar, Professor of Practice, NITTTR Kolkata attended and qualified Certificate course** on "Demystifying Environmental and Sustainability Data for Effective Communication in the 21st Century" on 26 June-10 July, 2025, conducted in Online mode by Centre of Science and Environment, New Dephi in Online mode.

- **Prof. Anil Kumar, Professor of Practice, NITTTR Kolkata attended and qualified Certificate course** on "Climate Change and Disaster Risk", conducted by the National Institute of Disaster Management (NIDM), Ministry of Home Affairs, (GOI) for Four (4) week duration (01 July-29 July, 2025).

- **Prof. Anil Kumar, Professor of Practice, NITTTR Kolkata attended the 1st Residential Comprehensive Course on " Disaster Risk Management" on 21July, 2025 to 1st August, 2025 by** National Institute of Disaster Management (NIDM), Ministry of Home Affairs, (GOI) at its Delhi (Rohini) Campus.

Conference presentations by Dr. Rayapati Subbarao:

1. Dr. Rayapati Subbarao participated and presented **Three papers** in the International Conference On Green Technology & Sustainability (ICGTS 2025), conducted by NITTTR Kolkata, from 29th to 30th May 2025 and won **'Best Paper' Award** for the paper on 'Viability of alternative fuels in transportation for sustainable future'.
2. Dr. Rayapati Subbarao participated and presented **Two papers** in the International Conference On Global Climate Action: Strategies for a Sustainable

Future (GCASSF 2025), conducted by NITTTR Kolkata, from 28th to 29th Aug 2025 and won **'Best Paper' Award** for the paper on 'Computational analysis on the shear strain scenario in case of a counter rotating turbine stage'. Same paper received the '**Outstanding paper' Award** in the conference.

Prof. Naveen B.P.

Interactive session with school students as part of PM SHRI initiative

Prof. Naveen B.P. delivered an insightful talk on "Green Schools: Sustainable Practices in Education" to the students of Kendriya Vidyalaya as part of the PM SHRI (PM Schools for Rising India) initiative on 21st July 2025. The session aimed to educate the school community about eco-friendly practices, sustainable technologies, and innovative initiatives that can be adopted within school environments.

During the talk, Prof. Naveen emphasized the importance of integrating sustainability into everyday school activities and the curriculum. He highlighted practical steps that students, teachers, and administrators can take to build greener, more responsible educational spaces, ranging from waste management and water conservation to the use of renewable energy and biodiversity preservation. The session served as a valuable platform to inspire young minds and encourage a collective commitment toward environmental stewardship and climate-conscious education.

Hands-on Concrete Pavement Project at NITTTR Kolkata

The Prof. Debi Prasad Mishra, Director, inaugurated the NITTTR Residential Campus Road on May 29, 2025. Nearly three decades ago, an innovative solution to the deteriorating roads within the NITTTR Kolkata residential campus was conceptualized, an idea that not only addressed critical infrastructure needs but also pioneered a new model for experiential learning in engineering education. This vision culminated in the design and construction of a concrete pavement prototype, marking the inception of a unique, hands-on educational project within the institute.

As the first-of-its-kind academic initiative at NITTTR Kolkata, the project empowered students to directly apply their classroom knowledge of concrete pavement design in a real-world context. From initial planning and material selection to on-site execution, students were involved at every stage, gaining invaluable hands-on experience. This integration of theory and practice bridged the gap between academic learning and field application, an essential component in producing industry-ready engineers.

The project was conceptualized, designed, and successfully implemented under the expert mentorship of Prof. Naveen B. P., whose guidance ensured academic rigor, engineering precision, and adherence to safety protocols. Prof. S. K. Mandal played a pivotal role in coordinating the logistical aspects, including procurement of materials and arrangement of labour.

Two M. Tech students, Satyam Roy and Saptarshi Das, actively contributed to the project as part of their mini-project work. Additionally, Avishek Ghosh, provided crucial support in material testing and on-site construction monitoring alongside the students.

Today, this concrete pavement stands as a living laboratory within the campus, an enduring example of how infrastructure development can be harmoniously integrated with technical education. It remains a model for applied learning, fostering the growth of future-ready engineers and demonstrating the transformative power of hands-on, project-based learning in engineering.

NITTTR Kolkata Marks Doctor's Day 2025 with Health Camp

On July 7, 2025, NITTTR Kolkata observed National Doctor's Day under the theme *"Healing Hands, Caring*

Hearts." As part of its SDG Goal 3 outreach (Good Health and Well-being), a free health camp was organized on campus from 10:30 AM to 3:30 PM.

Coordinated by Prof. Naveen B.P., the event aimed to raise awareness about preventive healthcare and offered services like BP & sugar checks, ECG, dental and eye consultations, and general health screenings. Over 55 participants benefited from the initiative.

Prof. Chandan Chakraborty welcomed attendees and honoured Mr. Raja Gupta (ILS Hospital) for his support. Prof. Niladri Pratap Maity delivered a special address, recognizing the vital contributions of the medical community.

Doctors from ILS Hospital and ASG Eye Hospital, supported by Transparent Hands, provided consultation and referrals, making the event a meaningful success.

"Prof. Naveen BP at ACM 2025 Valedictory: Celebrating Materials Science Innovations"

"Prof. Naveen BP had the honour of attending as the Chief Guest at the Valedictory Function of the International Conference on 'Advances in Composites and Materials (ACM 2025)', organized by Government Polytechnic, Bramhapuri, Dist. Chandrapur, Maharashtra, held on 30–31 May 2025.

It was a privilege to be part of such a vibrant and intellectually stimulating gathering of researchers, academicians, and industry experts, all dedicated to advancing the frontiers of materials science and engineering. The discussions, insights, and collaborations during the event truly highlighted the potential for innovation in this field."

Inauguration of Computational Civil Engineering Laboratory & Unveiling of the Department of Civil Engineering Booklet

On 6th June 2025, the Hon'ble Director, Prof. Debi Prasad Mishra, inaugurated the Computational Civil Engineering Laboratory and unveiled the Department of Civil Engineering Booklet, marking a significant milestone in the department's academic and research infrastructure development.

The Computational Civil Engineering Laboratory is a state-of-the-art facility designed to elevate the research and academic capabilities of trainers, postgraduate students, and PhD scholars. This advanced platform will serve as a hub for cutting-edge learning, offering high-fidelity simulations, in-depth analysis, and driving innovation in the field of computational civil engineering.

The laboratory is set to become a cornerstone for postgraduate and doctoral education, enabling students and researchers to gain a deeper understanding of complex engineering challenges. By

providing access to the latest tools and technologies, it aims to nurture the development of innovative solutions, preparing individuals for impactful careers in both academia and industry.

We look forward to seeing the laboratory evolve into a vibrant space of collaboration, excellence, and groundbreaking research in the field of civil engineering.

Memorandum of Understanding (MoU) Between NITTTR Kolkata and MIDAS Software

On 6th June 2025, a Memorandum of Understanding (MoU) was signed between the National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata, and MIDAS Software, marking a major step forward in fostering strong academic-industry collaborations.

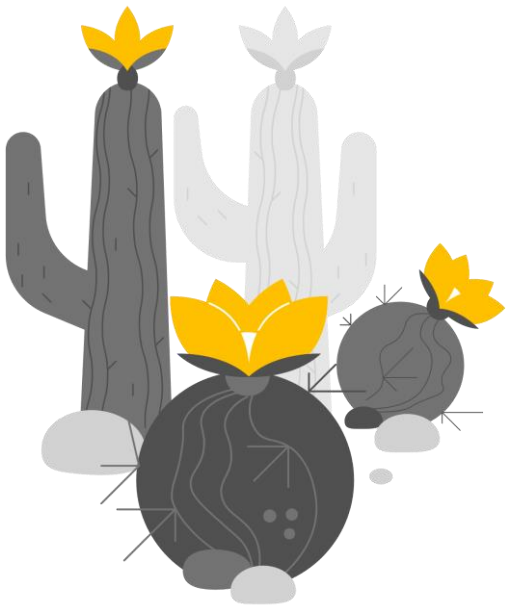
The MoU focuses on advancing training, research, and technology integration within the domains of civil and structural engineering. This partnership will provide a platform to enhance the skills of future engineers while promoting innovative teaching and learning practices aligned with industry standards.

The signing ceremony, held at the NITTTR Kolkata campus, was attended by senior officials and key representatives from MIDAS Software. The collaboration aims to equip students and professionals with cutting-edge tools and methodologies, enhancing their expertise and preparing them for real-world engineering challenges.

Conference Proceedings

This publication compiles the abstracts presented at the conference, which took place at the **National Institute of Technical Teachers Training and Research (NITTTR) Kolkata** on **May 29-30, 2025**. The proceedings highlight cutting-edge research and innovative approaches to green technology and sustainability, offering valuable insights from scholars, practitioners, and industry leaders.

Citation: Naveen, B. P. (Editor), *Proceedings of Abstracts of the "1st International Conference on Green Technology & Sustainability (ICGTS 2025)"*. NITTTR Kolkata, May 29-30, 2025.




AUDITORIUM
Tiranga Yatra at NITTTR Kolkata on
11.08.2025


Tiranga Rangoli Competition at NITTTR
Kolkata on 07.08.2025

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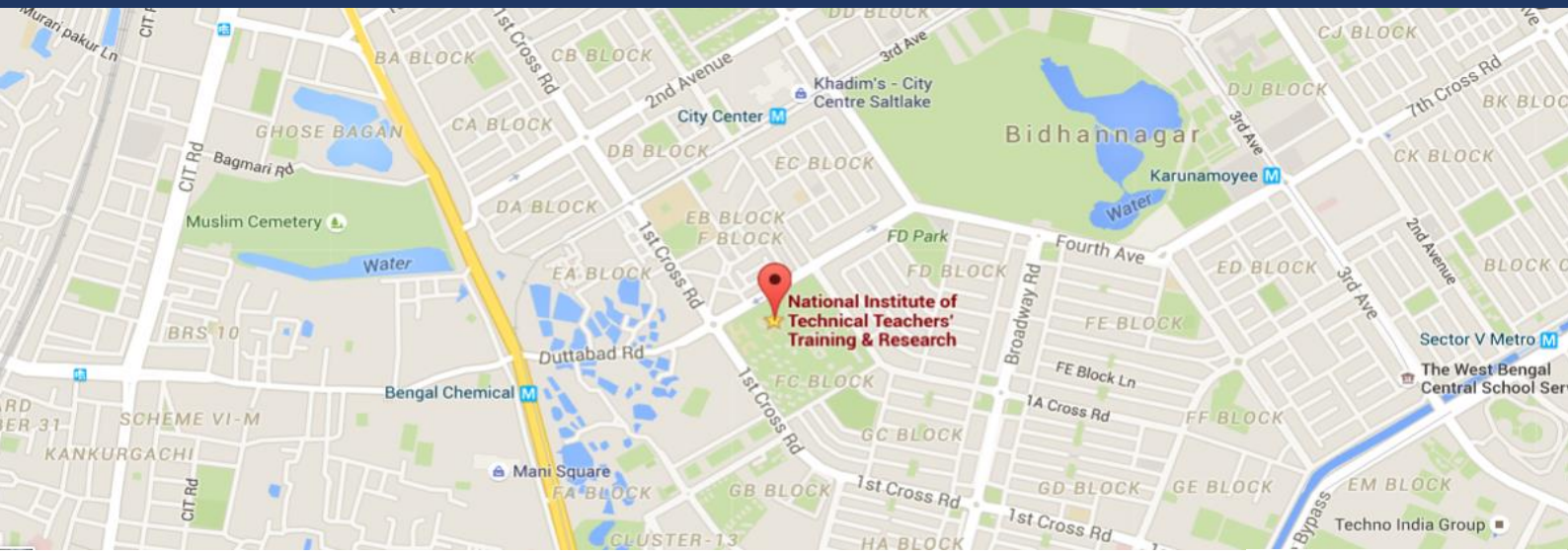
"Educate and raise the masses, and thus alone a nation is possible"
- Swami Vivekananda



Distance:

- From Howrah Railway Station: **42 min** (8.1 km) via Maniktala Main Road
- From Sealdah Station: **26 min** (7.4 km) via Beliaghata Main Road and Broadway Road
- From Kolkata Railway Station: **16 min** (4.8 km) via Canal Circular Road
- From Shalimar Station: **38 min** (18.8 km) via Parama Island Flyover
- From Netaji Subhas Chandra Bose International Airport: **27 min** (11.5 km) via Kazi Nazrul Islam Sarani/VIP Road

Google map link: https://goo.gl/maps/F7gssJoeqxSvffqf9

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