

Two Weeks Faculty Development Program on “Emerging Trends & Practices in Optimization and Sustainable Technology”

Date: 2nd June – 13th June 2025

Venue: Gujarat Extension Centre, NITTTR Bhopal, Ahmedabad

The **Electrical Engineering Department of L. D. College of Engineering (LDCE), Ahmedabad**, in collaboration with the **National Institute of Technical Teachers’ Training and Research (NITTTR), Bhopal**, organized a **two-week Faculty Development Program (FDP)** on “*Emerging Trends & Practices in Optimization and Sustainable Technology*” during **2nd to 13th June 2025** at the **Gujarat Extension Centre, NITTTRB, Ahmedabad**.

The FDP was attended by **25 faculty members** from various engineering colleges and polytechnics across Gujarat.

Highlights of the FDP:

The program featured eminent speakers and technical sessions on advanced optimization techniques and sustainable practices:

- **Prof. (Dr.) R. V. Rao (SVNIT, Surat)** delivered sessions on **Rao-1 and Rao-2 algorithms** for engineering applications.
- **Prof. B. R. Bhalja (IIT Roorkee)** presented on **Smart Grid technologies**, while **Dr. B. N. Suthar (LEC Morbi)** discussed **AI tools for optimization**.



- **Prof. (Dr.) H. D. Mehta (VGEC)** contributed insights on **Genetic and Differential Evolution Algorithms**.



- **Dr. Vipin Tripathi (NITTTR)** and **Prof. (Dr.) Nishith Dubey (NITTTR)** addressed topics such as **NEP 2020 implementation** and **entrepreneurship in engineering education**.



- **Prof. (Dr.) C. S. Thakar (LDCE)** and **Prof. F. A. Macwan (LDCE)** explored **content optimization** and **Python for engineering optimization**, respectively.



- Practical case studies included **BLDC motor innovations** (Prof. Tejas Panchal, Nirma University), **Jaya optimization** (Dr. V. R. Patel), and **synaptic transmission modelling** (Dr. Vijay Dave, GEC Gandhinagar).



- Additional sessions on **non-linear optimization, sustainable technology, MCDM/MADM, and mixed-integer programming using GAMS** added valuable depth to the program.

Experiential Learning:

Two **industrial visits** were conducted — one to **Gujarat Power Research & Development Cell at IIT Gandhinagar**, and another to **CIPET, GIDC Vatva**, enhancing practical understanding.

These visits bridged theory with practical insights into optimization and sustainability in real-world applications.





FDP on "Emerging Trends & Practices in Optimization and Sustainable Technology"
Prog. Code: Guj.-8 (02-13 June 2025)
Venue: Gujarat Extension Centre, NITTTRB, Ahmedabad

TECHNOLOGY BHAVAN

1st Row (L to R): 1. Dr. Mihir Vasavada, Assi. Prof., LDCE, A'bad 2. Dr. Kunal A. Bhatt, Asso. Prof., LDCE, A'bad 3. Dr. V.K. Tripathi, Professor, NITTTR Bhopal
 4. Dr. Nishith Dubey, Professor, NITTTR Bhopal 5. Dr. Ashish Shah, Assi. Prof., GEC, Bharuch

2nd Row (L to R): 1. Mr. Manojkumar P. Parmar 2. Mr. Dharamraj V. Dodiya 3. Mr. J. M. Parmar 4. Dr. Maheshbhai J. Vanraja 5. Mr. Harshadkumar D. Patel 6. Dr. Dixitkumar P. Pathak
 7. Mr. Maheshkumar J. Patel 8. Mr. Urvis A. Shah

3rd Row (L to R): 1. Mr. Kishorkumar M. Makwana 2. Mr. Arvindkumar V. Prajapati 3. Mr. Dipak J. Parmar 4. Mr. Vishal B. Patel 5. Dr. Shashi V. Ranga 6. Dr. Niraj J. Modi
 7. Mrs. Rituben S. Patel

4th Row (L to R): 1. Mr. Nayankumar P. Vasava 2. Mr. Samir K. Raval 3. Mr. Alpeshkumar Upadhyah 4. Dr. Jaydeep M. Patel 5. Mr. Ajay K. Damor

The FDP concluded with an **achievement test**, **feedback session**, and a **valedictory function**, marking the successful completion of a highly engaging and impactful academic initiative. The program fostered active interaction, knowledge sharing, and capacity building in optimization strategies and sustainable technologies.



The program was efficiently coordinated by **Prof. Dr. Vipin Tripathi** (NITTTR Bhopal), **Dr. V. R. Patel**, **Dr. Mihir Vasavada** (LDCE), and **Dr. Kunal Bhatt** (GEC Gandhinagar).