

URJA, ISSUE-II

NEWS LETTER, JULY-DEC 2025

LAKSHMI NARAIN COLLEGE OF TECHNOLOGY, BHOPAL

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Vision

To impart knowledge of electrical and electronics engineering and mould students into world class professional to achieve excellence in engineering education.

Mission

- To impart quality education in Electrical and Electronics Engineering by providing strong theoretical and practical exposure to global standards.
- To nurture competent engineers with ethical values, leadership skills and a commitment to lifelong learning, enabling them to serve society responsibly.
- To promote research, innovation consultancy and industry collaboration for technological advancement and sustainable development.
- To create an environment that encourages creativity, entrepreneurship and professional excellence in the field of Electrical and Electronics Engineering.

Program Specific Outcomes (PSOs)

PSO-1	<i>Develop the ability to model, analyse, test and design using modern software and programming tools in the field of Electrical and Electronics engineering.</i>
PSO-2	<i>Capability to solve complex engineering problems in modern electrical and Electronics applications professionally to provide efficient and socially acceptable technical solution.</i>
PSO-3	<i>Apply project management techniques and computational skills to manage multidisciplinary such as green energy, AI tools etc. while adhering to professional ethics and environmental standards for sustainable industrial development.</i>

Program Educational Objectives (PEOs)

PEO-1	<i>Graduates will demonstrate the ability to apply fundamental knowledge of mathematics, science and engineering to identify, analyse and design innovative solutions for real world problems in Electrical and Electronics Engineering as demand of industry and society.</i>
PEO-2	<i>Graduate will develop the ability to design and implement efficient, cost effective and sustainable computing and electrical systems, using appropriate methodologies to meet the evolving technological demands of present scenario for society.</i>
PEO-3	<i>Graduate will be proficient in using modern engineering tools, software and techniques to solve complex engineering problems in a global, economic, environmental and social context.</i>
PEO-4	Graduates will exhibit professionalism, ethical behaviour and an understanding of the economic implications of their engineering solutions. Their well communication and team work, preparing them to take leadership quality in the practice of Electrical and Electronics Engineering.

Department of Electrical & Electronics Engineering organized an expert lecture on 06.11.2025 on the topic of Electrical Transmission and Distribution in the Vikram Sarabhai seminar hall of Lakshmi Narain College of Technology, Bhopal for 2nd year and 3rd year students. Er. Satish Chandra Tiwari was the keynote speaker. He explained the workings of the MPMKVCL to the students. The lecture was started by describing the importance of electrical engineering in everyday life. He also explained systems like smart metering, underground cables, solar power and consumer billing. He then answered student's questions. Er. Satish Chandra Tiwari is an alumnus of Lakshmi Narain College of Technology, Bhopal 2010 batch. Overall, the lecture was very interesting and beneficial to all the students.



Workshop on Control Panel and VFD Motors

The Workshop on the topic of "Control Panel and VFD Motors" was held on 06 October, 2025, at Electrical and Electronics Engineering Department LNCT Bhopal. The workshop was conducted by Er. Shanu Kumar, Automation Engineer, Arist Automation Bhopal. He gave hands-on experience to students on topics such as VFD motors, different types of starters, control panels, SMPS, SCADA, HMI and PLC. The workshop aimed to provide third-year students with valuable insights and practical knowledge in the field of Electrical Engineering. It provided third-year students with a valuable learning experience and practical knowledge in the field of Electrical Engineering.



Industrial Visit to Central Power Research Institute (CPRI) Bhopal

Students of Electrical & Electronics and Electrical Engineering of 3rd year Lakshmi Narain College of Technology, Bhopal were taken to an industrial visit at Central Power Research Institute (CPRI) Govindpura Bhopal on 20 November 2025. The Industrial Visit of students was flagged off by Dr. Ashok Kumar Rai Director Administration LNCT Group. He also interacted with the students participating in the Visit.



Harit Urja Conclave 2025

Students from Electrical and Electronics Engineering Department actively participated in the Harit Urja Conclave 2025. They gained valuable insights into various perspectives of electricity generation, efficient power utilisation, and the growing importance of renewable energy in reducing dependency on conventional sources. The sessions also helped students understand current and future developments in Solar Power Plants, Wind Energy Projects, and other clean-tech initiatives shaping Madhya Pradesh's sustainable energy ecosystem. The conclave concluded with a formal Vote of Thanks delivered by Mr. Anirudh Dubey, Assistant Resident Director, PHDCCI (State Department Council, Madhya Pradesh State Chapter).



6th Sem Toppers – EX Branch LNCT GROUP OF COLLEGES, BHOPAL



RGPV RESULT OF VI SEM

ELECTRICAL AND ELECTRONICS ENGINEERING (EX),
LNCT BHOPAL, JUNE 2025

Congratulations

 Mr PRAKASH SHARMA 0103EX221021 SGPA 8.67	 Mr YASH OJHA 0103EX221035 SGPA 8.54	 Mr AMIT KUMAR SHARMA 0103EX221007 SGPA 8.33
 Ms REENA THAKUR 0103EX221024 SGPA 8.08	 Ms ANSHIKA VYAS 0103EX221010 SGPA 8.04	

 www.LNCTU.ac.in  7440777222/111/555

FACULTY CERTIFICATION OF MOOC'S THROUGH SWAYAM &NPTEL					
S. N.	NAME OF FACULTY	DEPARTMENT	NAME OF COURSE PASSED	COURSE OFFERED BY (AGENCY)	GRADE OBTAINED IF ANY
1	DR. NAVEEN ASATI	EX	Network Analysis	NPTEL	79
2	Dr Anand Singh	EX	Introduction to Intellectual Property	NPTEL	64

STTP & FPD				
S. N.	NAME OF FACULTY	DEPARTMENT	TITLE	
1	DR. NAVEEN ASATI	EX	Thermal Polygeneration for Sustainable Energy Development (TPSED-25)	ATAL FDP

ACADEMIC RESEARCH JOURNAL

S.N.	AUTHOR NAME	TITLE
1	Dr. Sujeet Kumar Soni	Power Quality Improvement of Solar based G2V Integration System using PI Controller
2	Dr. Sujeet Kumar Soni	AI-Enhanced Direct Torque Control with Space Vector Modulation (DTC-SVM) for Induction Motor Drives: Recent Advances and Performance Improvements
3	Rakeshwri Agrawal	Sensitivity Analysis of Sustainability Dimensions in Technology Ranking in Multi-Criteria Decision-Making Approaches
4	Shriyansh Jain	Design and Functional Analysis of Battery Energy Storage Systems for Renewable Power Applications
5	Vishwanath Tiwari	Resilient Protection Strategy for PV-fed DC Microgrid with Immunity to Intermittency and Outage of PVDG Using GWO-Tuned LSTM
6	Vikas Kumar	An Intelligent Control Framework for Energy Storage System in Smart Grid Application
7	Dr Hemant Mahala	Designing and Implementation High-Performance FIR Filter Architecture using Distributive Arithmetic Technique: - A Review
8	Dr. Naveen Asati	Energy Audit: A Case Study of An Academic Hostel Uttam Nagar Delhi
9	Dr. Naveen Asati	Optimization of Hybrid Energy System for Optimum Power Flow
10	Manvendra Singh Kaurav	Economic Load Dispatch with The Help of Artificial BEE Colony Technique
11	Dr. NAND KISHORE	Grid-Connected Solar PV System with MPPT for Battery Energy Storage: A Review
12	Dr. NAND KISHORE	Total Harmonic Distortion of Bidirectional AC-DC Microgrid System for PV Application
13	Dr. Vikram Singh	Application Of Direct Torque Control in Robotic Actuation System: Performance Analysis and Industrial Relevance-A Review
14	Dr. Vikram Singh	Power Quality Improvement of Solar Based G2v Integration System Using Pi Controller
15	Dr. Vikram Singh	Ai Enhancement to Replace Rigid Pi Controller with Adaptive System: A Review
16	Dr. Vikram Singh	Space Vector Modulation- Based Direct Torque Control (Dtc-Svm) For Robotic Applications
17	Dr. Vikram Singh	Direct Torque Control of Permanent Magnet Synchronous Motor Electric Vehicle Drive by Using Fuzzy Logic Based Controller
18	Dr. Syed Uvaaid Ullah	AI enhanced direct torque control with space vector modulation (DTC-SVM) for induction motor drive
19	Kamlesh Kumar Vishwakarma	Application Of Direct Torque Control in Robotic Actuation System: Performance Analysis and Industrial Relevance-A Review

20	Kamlesh Kumar Vishwakarma	AI-Enhanced Direct Torque Control with Space Vector Modulation (DTC-SVM) for Induction Motor Drives: Recent Advances and Performance Improvements
21	Kamlesh Kumar Vishwakarma	Space Vector Modulation- Based Direct Torque Control (Dtc-Svm) For Robotic Applications
22	Dr. Vikram Singh	Space Vector Modulation- Based Direct Torque Control (Dtc-Svm) For Robotic Applications
23	Sandeep Kumar	optimized energy storage system for enhanced ev performance
24	Sandeep Kumar	review of hybrid energy storage system for enhanced ev performance

	DEVELOPMENT ACTIVITIES (PATENT)		
S. N.	Faculty Name	Patent Name	Patent Application Number
1	Dr Anand Singh	Midget Smart Cabinet	202421004160
2	Dr Anand Singh	Intellihatch	202421021508
3	Dr Anand Singh	Intelligent Vehicle	202421025189
4	Dr Anand Singh	Remote Controlled Wall-Mount Fan Axis Movement	202421055198
5	Dr Anand Singh	Portable Solar Biomass Cooking System (PSBCS) for Rural Areas	202421101821
6	Sandeep Kumar	optimized power management in hybrid energy storage systems for electric vehicles	202521028232

Name of Editor-Prof Vivek Rai

Name of Students- Adityanath Tiwari,

Ayush Deshmukh, Gaurav Tiwari