



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING  
PRESENTS

# ELECTRICK

NBA  
ACCREDITED  
PROGRAM



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# MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

## Department of Electrical and Electronics Engineering

### VISION

To achieve global standards in the field of Electrical and Electronics Engineering to minimize skill gap between academia and industry.

### MISSION

**M1:** Imparting quality technical education to the students of Electrical and Electronics Engineering with the supportive environment, preparing them for competitive exams for higher education, employment, and entrepreneur practices.

**M2:** To confer the students with professional attitude, research aptitude, technical and communication skills with sensitivity towards the environment and society.

### PROGRAM EDUCATIONAL OBJECTIVES

**PEO 1.** To equip the students of Electrical and Electronics Engineering with fundamental knowledge of science and technology to excel in their career or pursue higher studies.

**PEO 2.** To inculcate creative, analytical and critical reasoning skills for real world challenges.

**PEO 3.** To contribute to society with professional and social ethics.

**PEO 4.** To instill the students with soft skills, team work skills, leadership qualities and lifelong learning for successful career.

### PROGRAM SPECIFIC OUTCOMES

**PSO 1:** Apply the principles of basic sciences and Electrical and Electronics Engineering to design, analyze and solve problems in the core/multi-disciplinary areas.

**PSO 2:** Apply the acquired technical knowledge for pursuing higher studies and successful professional career in the field of Electrical and Electronics Engineering

# A LOOK WITHIN

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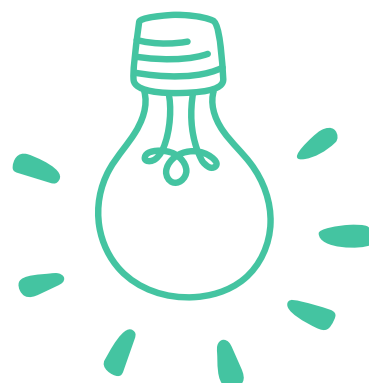


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## JOURNAL PUBLICATIONS

- [1] M. Tushir, et al., "A comprehensive survey on the significance of industrial Internet of Things, energy management and big data analytics," *Journal of Information & Optimization Sciences*, vol. 45, no. 2, pp. 123–140, 2024. [ESCI indexed].
- [2] M. Tushir, "Conditional Spatial biased intuitionistic clustering technique for brain MRI image segmentation," *Frontiers in Computational Neuroscience*, vol. 18, no. 1, pp. 55–74, 2024. [SCI-E indexed].
- [3] M. Tushir, S. Goel, "A conditionally positive definite kernel function for clustering of incomplete data," *Journal of Information & Optimization Sciences*, vol. 45, no. 4, pp. 301–320, 2024. [ESCI indexed].
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- [5] S. Gupta, N. Gupta, R. Kamra, "Comparative Analysis of a Supercapacitor and Li-ion battery based Electric Vehicle," *Journal of Information and Optimization Sciences*, vol. 45, no. 1, pp. 65–95, 2024. [ESCI indexed].
- [6] S. Gupta, "A survey of cyber security threats & countermeasures in the Indian Financial Sector," *Journal of Information and Optimization Sciences*, vol. 45, no. 2, pp. 185–202, 2024. [ESCI indexed].
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- [10] N. Gupta, "Multiple Criteria Based Intelligent Techniques for Efficient Handover in Next Generation Networks," *International Journal of Sensors, Wireless Communications and Control*, vol. 14, no. 2, pp. 150–168, 2024. [Scopus indexed].



- [11] M. Rani, "Optifusion: advancing visual intelligence in medical imaging through optimized CNN-TQWT fusion," *The Visual Computer*, vol. 41, no. 1, pp. 112–130, 2024. [SCIE indexed].
- [12] M. Rani, "OT-CGSF: Optimal Transport and CNN-Guided Score-Based Fusion for Multimodal Medical Image Integration," *Iranian Journal of Science and Technology, Transactions of Electrical Engineering*, vol. 49, no. 2, pp. 144–160, 2024. [SCIE indexed].
- [13] S. Rathee, "Enhanced LCC Compensation Topology with Integrated Duo Transmitter Winding for Efficient Wireless Power Transmission in EV," *Proceedings on Engineering Sciences*, vol. 7, no. 1, pp. 78–93, 2024. [Scopus indexed].

## CONFERENCE PAPERS

- [1] A. Dagar, "Electrical Power Plant Decision-Making by Utilizing IFS Weighted Averaging Operator," in *Proc. Int. Conf. Intelligent and Innovative Technologies in Computing, Electrical and Electronics*, 2024. [Scopus indexed].
- [2] A. Dagar, "Energy Difference Based Fault Detection in Standalone Microgrid," in *Proc. 3rd Int. Conf. Advances In Computing, Communication and Materials*, 2024. [Scopus indexed].
- [3] S. Malik, "Ambiguous Fuzzy Einstein Ordered Averaging Operator: Application to the Classification of Power Generation Methods," in *Proc. 4th IEEE Int. Conf. Advance Computing and Innovative Technologies in Engineering*, 2024. [Scopus indexed].
- [4] R. Kamra, "A Systematic Literature Review on Intuitionistic Fuzzy Decision Making with Applications in Green Energy," in *Proc. Int. Conf. Advances in Computing, Communication and Materials (ICACCM)*, 2024. [Scopus indexed].
- [5] R. Kamra, "Survey of Green Data Centers: A Comprehensive Review," in *Proc. Natl. Conf. Recent Trends in Climate Change, Energy and Sustainability (NCRTCES-2024)*, 2024.
- [6] N. Gupta, "Development of Home Automation System with LPG Leakage Detection System Using IoT," in *Proc. Int. Conf. Multidisciplinary Research and Innovation (ICMRI 2023)*, 2024. [Scopus indexed].
- [7] N. Gupta, "Diabetes Prediction Model," in *Proc. ICACCIS-2024*, 2024.

- [8] N. Gupta, "Simulation and Hardware Model for Buck Converter and Boost Converter," in Proc. Renewable Power 2024, 2024. [Springer indexed].
- [9] N. Gupta, "Facial Detection in Computer Vision: Bridging Gap Between CNN, HAAR Cascade and MTCNN," in Proc. Artificial Intelligence and Applications, 2024. [Springer indexed].
- [10] N. Gupta, "Digitalization in Operations Management Practices in Organizations," in Proc. 13th TIPSCON 2024: An Int. Conf. Sponsored by ICSSR, 2024.
- [11] N. Gupta, "Realtime Driver Drowsiness Detection using YOLOv5 and Computer Vision Techniques," in Proc. 14th TIPSCON 2024: An Int. Conf. Sponsored by ICSSR, 2024.
- [12] N. Gupta, "Human Neural Network and Artificial Neural Networks: Analogy Review," in Proc. 15th TIPSCON 2024: An Int. Conf. Sponsored by ICSSR, 2024.
- [13] N. Gupta, "Global Research Trends in Blockchain in Smart Grid: A Text Mining-Based Scientometric Study," in Proc. NCRTCES-2024, MSIT, 2024.
- [14] M. Rani, "ATCNN-DWT Integration: A Combined Approach for Advanced Medical Image Fusion," in Proc. Int. Conf. Modelling Simulation & Intelligent Computing (MoSiCom 2023), 2024. [Scopus indexed].
- [15] M. Malik, "Street Light Controlling using Genetic Algorithm," in Proc. 2nd IEEE Int. Conf. Computational and Characterisation Techniques in Engg and Sciences (CCTES-24), 2024. [Scopus indexed].
- [16] S. Rathee, "Solar Photovoltaic MPPT Analysis Using PO Fuzzy Logic Controller and IC Fuzzy Logic Controller," in Proc. 3rd Int. Conf. Control, Computing, Communication and Materials (ICCCCM-2024), 2024. [Scopus indexed].
- [17] S. Rathee, "Renewable Energy System Applications of Ambiguous Fuzzy Hybrid Averaging Operator," in Proc. 2nd Int. Conf. Integrated Circuits and Communication Systems (ICICACS-2024), 2024. [Scopus indexed].
- [18] S. Rathee, "Sustainability of Renewable Energy Sources Classification Utilizing Moderator Intuitionistic Fuzzy Hybrid Averaging Operator," in Proc. Int. Conf. Advances in Electrical, Computing, Communication and Sustainable Technology (ICAECT 2024), 2024. [Scopus indexed].
- [19] N. Singh, "Renewable Energy System Applications of Ambiguous Fuzzy Hybrid Averaging Operator," in Proc. 2nd Int. Conf. Integrated Circuits and Communication Systems (ICICACS-2024), 2024. [Scopus indexed].

## FACULTY ACHIEVEMENTS

- Dr. Nidhi Gupta has received the Best Paper award for the paper titled, "Global Research Trends in Blockchain in Smart Grid: A text Mining based Scientometric Study" at NCRTCES-2024
- Dr. Nidhi Gupta was invited as a resource person in the webinar on the topic "IOT & Project Automation" by Technia Institute of Advanced Studies, New Delhi on 11 May 2024

## CERTIFICATION COURSES

- Dr. Meena Tushir has been declared a topper with the Elite Silver award in both the "Deep Learning" course (July–October 2024) and the "Python for Data Sciences" course (January–February 2024), placing in the top 5% and top 2% respectively among all candidates in NPTEL courses conducted by IIT Madras and funded by the MoE, Government of India.
- Dr. Sonia Goel has completed the "Deep Learning" course (July–October 2024) and the "Python for Data Sciences" course (January–February 2024) with Elite and Elite Silver awards, and has been declared a topper, placing among the top 2% of all candidates for the "Python for Data Sciences" course, under the NPTEL program conducted by IIT Madras and funded by the MoE, Government of India.
- Dr. Sunil Gupta completed the NPTEL-AICTE Faculty Development Programme on "Introduction to Internet of Things" (January–April 2024) with Elite and Silver awards.
- Dr. Shilpam Malik completed two NPTEL-AICTE Faculty Development Programmes in 2024: "Introduction to Internet of Things" and "Energy Literacy" (January–April 2024), receiving Elite and Silver awards in both courses.
- Dr. Nidhi Gupta completed "Scientific Computing Using Python" conducted by IIT Kanpur and funded by the MoE, Government of India during 8 week, July 2024– October-2024 & "Introduction to Internet of Things" course (January–April 2024) and received Elite and Silver awards.
- Dr. Rakhi Kamra completed the "Data Mining" (January–March 2024) and "Introduction to Law on Electricity" (July–September 2024) courses in 2024, securing Elite and Silver award.
- Dr. Monu Malik completed the "Energy Literacy Training" course from December 2024 to March 2025.

## FACULTY DEVELOPMENT PROGRAMS

1. Prof. Meena Tushir, Dr. Sunil Gupta, Dr. Nidhi Gupta, Ms. Nisha Singh, Ms. Mamta Rani and Dr. Jyoti Jain completed a Faculty Development Program on IoT for one week, conducted by MSIT in association with Brain Mentors, from January 15 to January 19, 2024.
2. Dr. Jyoti Jain and Ms. Mamta Rani completed a Faculty Development Program on Cybersecurity for one week, conducted by MSIT in association with Brain Mentors, from February 5 to February 9, 2024.
3. Dr. Jyoti Jain, Ms. Mamta Rani, Dr. Sonia Goel, Dr. Monu Malik, Ms. Annu Dagar, Dr. Shilpam Malik and Mr. Sachit Rathee completed a Faculty Development Program on Recent Trends in AI for one week, conducted by MSIT in association with Pantech Learning from January 22, to January 27, 2024.
4. Ms. Nisha Singh, Mr. Sachit Rathee, Dr. Monu Malik, Dr. Rakhi Kamra, Dr. Shilpam Malik, and Dr. Sonia Goel completed the program on Energy Storage Materials and Technology for one week, conducted by MSIT in association with NITTTR, Chandigarh, from March 11 to March 15, 2024.
5. Dr. Nidhi Gupta, Dr. Sunil Gupta, Dr. Monu Malik, Dr. Rakhi Kamra and Dr. Sonia Goel completed a program on Energy Storage Materials and Technology for one week, conducted by MSIT in association with NITTTR, Chandigarh, from May 6 to May 10, 2024.
6. Dr. Nidhi Gupta completed a program on Research Methodology for one week, conducted by IIITDM, Kancheepuram, Chennai, from March 11 to March 15, 2024.
7. Ms. Nisha Singh completed the program on "Emerging Trends in Electronics and Communication Engineering: Machine Learning and Data Science" for one week, conducted by the Department of ECE, BVP New Delhi (Online Mode), from March 11 to March 15, 2024.

## FACULTY DEVELOPMENT PROGRAMS

8. Dr. Sonia Goel, Dr. Rakhi Kamra and Dr. Monu Malik completed a program on Curriculum Design for Outcome-Based Education for one week, conducted by the Curriculum Development Centre Department at MSIT, Janakpuri, from June 3 to June 7, 2024

9. Dr. Rakhi Kamra, Dr. Monu Malik, Dr. Sonial Goel, Dr. Nidhi Gupta and Dr. Sunil Gupta completed a program on Energy Storage Materials and Technology for one week, conducted by the Applied Science Department at MSIT, Janakpuri, from May 6 to May 10, 2024.

10. Prof. Meena Tushir, Dr. Jyoti Jain, Dr. Sunil Gupta, Dr. Nidhi Gupta, Ms.Mamta Rani, Dr. Sonia Goel, Dr. Monu Malik, Dr. Shilpam Malik, Ms. Annu Dagar, Mr. Sachit Rathee, Ms. Nisha Singh and Dr. Rakhi Kamra completed a program on Modeling and Simulation using MATLAB for one week, conducted by the Electrical and Electronics Engineering Department at MSIT, Janakpuri, from Dec 16 to Dec 20, 2024.

11. Dr. Monu Malik, Dr. Mamta Rani, Dr. Shilpam Malik, and Dr. Annu Dagar completed a program on Developing Healthy Work Culture at Work Place for one week, at MSIT, Janakpuri, from Dec 02 to Dec 06, 2024.

12. Dr. Meena Tushir, Dr. Sunil Gupta, Dr. Sonia Goel, and Dr. Nidhi Gupta attended the Faculty Development Program titled "Emerging Trends in Control Systems and Sensor Technologies", held from 21st October 2024 to 26th October 2024 at NSUT, New Delhi organized under the ATAL FDP scheme.

13. Dr. Rakhi Kamra attended the two-week NEP Orientation & Sensitization Programme held at the Coimbatore Institute of Technology, Coimbatore, under the Malviya National Mission—Teacher Training Programme from December 4th to December



# SEMINARS & WORKSHOPS

## IOT UNLEASHED – HANDS-ON LEARNING FOR INNOVATORS

The Department of Electrical and Electronics Engineering organized an insightful workshop on "IoT unleashed – Hand on Learning for the Innovators " on October 14th 2024 and October 16th, 2024, delivered by Dr. Deepshikha Yadav, Assistant Professor, IT Department. The hands-on training workshop on IOT, coordinated by Dr. Nidhi Gupta, Assistant Professor, EEE Department, aimed to train second and third-year students of EEE.



## PCB DESIGN USING KICAD

The Department of Electrical and Electronics Engineering organized a comprehensive Hands-On Workshop on "PCB Design using KiCAD" for the EEE IV and VI semesters. The workshop was conducted by Mr. Vaibhav Bhardwaj and Mr. Shayak Choudhari, Ph.D. Prime Minister Research Fellow Scholar, IIT Delhi. The workshop was aimed at providing EEE students with practical skills and knowledge in the field of Printed Circuit Board (PCB) design. The sessions were conducted on March 6 and March 15, 2024, April 19, 2024, April 24, 2024 and April 26, 2024. The workshop was initiated with a detailed overview of PCBs, elucidating their significance, usage, and diverse applications across industries. Through engaging presentations and real-world examples, participants understood how PCBs are vital components in electronic devices, facilitating their functionality and connectivity. Furthermore, the speaker meticulously expounded on the structure and layers of PCBs, unravelling the complex architecture underlying these essential components. Participants were introduced to the multilayered composition of PCBs, comprising substrates, conductive traces, vias, and solder masks.



## ROLE OF COMMUNICATION IN CAREER



The Department of Electrical and Electronics Engineering organized a seminar titled "Role of Communication in Career" in collaboration with NASSCOM on 20th September 2024. The seminar was organized by Dr. Rakhi Kamra (Asst. Prof., EEE Dept.) and Ms. Neha (Asst. Prof., ECE Dept.). The guests of the day were: Ms. Shreya Chakraborty- a leader with 15 years of distinguished experience in Big4 Consulting, Technology, and Fintech industries. Ms. Sakshi Shukla- Company Secretary in Ciena with 4 years of experience. Ms. Jaanhavi Chaturvedi- Program Executive at NASSCOM foundation Mr. Akhilesh Jha- Program Executive at NASSCOM foundation. Ms. Shreya Chakraborty, an accomplished professional and expert in communication skills, was invited as the guest speaker. The seminar was aimed at highlighting the significance of communication skills for students aspiring to excel in their professional careers.

## INDUSTRIAL VISITS

### DELHI TRANSCO LIMITED (DTL), DWARKA



The Department of Electrical and Electronics Engineering organized an industrial visit to Delhi Transco Limited, Dwarka 220kV/66KV Grid sub-Station Pappan Kalan-III, Dwarka, New Delhi on September 12, 2024, to enhance the industrial and practical knowledge of the students. EEE III semester students. Mr. Sachit Rathee (Assistant. Prof. ) and Mr. Amit (Lab Assistant) accompanied the students.

## INDIAN MOBILE CONGRESS 2024



The India Mobile Congress (IMC) 2024, one of the largest telecom and technology events in Asia, was held from 15th to 18th October 2024 at Pragati Maidan, New Delhi. Organized by the Department of Telecommunications (DoT) and Cellular Operators Association of India (COAI), the theme of this year's event was "The Future is Now" focusing on the transformative potential of 5G, 6G, Artificial Intelligence (AI), quantum computing, and sustainable telecommunications.

IMC 2024 hosted over 100,000 attendees, including industry leaders, government officials, academia, and innovators from around the world. 20 students of EEE 3rd and EEE, 4th year along with Prof. Meena Tushir (HOD, EEE) and Dr. Rakhi Kamra (A.P, EEE Dept.) attended the conference and exhibitions visited on 16th October 2024

## EXPERT LECTURES

### AI-BASED MOTION CONTROL



The Department of Electrical and Electronics Engineering in association with IEEE PES Chapter MSIT organized an expert lecture on "AI-based motion control" by Prof. Prerna Gaur, Director West Campus, NSUT, New Delhi, and Chair, IEEE Delhi Section on April 23, 2024. In this lecture application of AI in different fields like Drones, bigger data precise control of motors, CNC machines, Robotics, AI-powered assistants, Autonomous Vehicles, Travel, and Transport, Automotive Industry, etc. was discussed.

### MACHINE LEARNING AND ITS APPLICATION

The Department of Electrical and Electronics Engineering organized an insightful expert lecture on "Machine Learning and Its Application: Classification" on September 28, 2024, delivered by Dr. Meena Tushir, Professor and Head of the EEE Department at MSIT. This lecture marked the second talk in the ongoing series on "Machine Learning and its Applications," where Dr. Tushir continued to share her extensive knowledge and experience in the field.





## OTHER EVENTS

- The Faculty Development Program (FDP) on "Modeling and Simulation Using MATLAB" was organized by the Electrical and Electronics Engineering Department of Maharaja Surajmal Institute of Technology (MSIT), New Delhi, in collaboration with the Department of Mechanical Engineering, NITTTR Chandigarh, from December 16 to 20, 2024. The event aimed to provide in-depth training in modeling and simulation techniques using MATLAB and Scilab, highlighting their importance in engineering research and education.
- The Department of Electrical and Electronics Engineering conducted a guest lecture on 'Electrifying your future: Exploring Future Prospects after Electrical Engineering' on September 05, 2024 for EEE I year students. Mr. Vaibhav Bhardwaj and Mr. Shayak Chaudhuri, Prime Minister Research Fellow (PMRF)- PhD Scholars, Department of Electrical Engineering, IIT Delhi were the speakers for the session. Mr. Vaibhav began the lecture by listing out the common and prevailing myths around B. Tech in Electrical Engineering. He mentioned that while it is considered to be one of the most difficult branches where students are assumed to land when all their choices are exhausted, it is a flexible branch. He also added that the electrical branch is highly versatile and opens up a lot of job opportunities
- The Department of Electrical and Electronics Engineering (EEE) of Maharaja Surajmal Institute of Technology, Janakpuri successfully conducted an online session on "How to Prepare for Higher Studies and Research" by Mr. AKSHAY ARYA, B.Tech EEE Batch (2016-2020), Analog Design Engineer, Alpha wave Semi, on 04 May, 2024. Mr. AKSHAY ARYA completed his M.Tech from the prestigious institute IISc, Bangalore.
- A Talk on "Books and Their Utility for Public Sector" was organized by the National Digital Library of India (NDLI) MSIT and the Department of Electrical and Electronics Engineering on 26 April 2024. Prof. Meena Tushir, Head, of the Department of Electrical and Electronics Engineering, and Dr. Nidhi Gupta, Head, of the Library Committee MSIT scheduled the talk for 4th, 6th, and 8th-semester students of EEE. On 26 April, 2024, the Seminar Hall # 406 of MSIT buzzed with enthusiasm as students gathered to learn from an achiever, Ms. Saloni Vats, who is an illustrious alumna of our institution and achieved an outstanding All India Rank (AIR) of 129 in the UPSC exams.
- The interviews to work as a research intern at IIT Delhi's EMPACT research lab by Mr. Shayak Chaudhari and Mr. Vaibhav Bhardwaj (Ph.D. Prime Minister Research Fellow Scholar, IIT Delhi) were held on 24th May 2024 in room 306A in MSIT. There had been a total of 21 candidates appearing for the interview. The candidates were asked basic questions about what they had learned in the workshop on "PCB Design using KiCAD", a synopsis of the projects they had mentioned in their resume, and also some fundamental questions about what the candidates had been taught in their electrical and electronics engineering course. Akshat Kareer, Amitoj Kaur, and Vijayant from 3rd year EEE, and Nirbhay Tiwari from 2nd year EEE were the four candidates selected as research interns and would be working at IIT Delhi's EMPACT research lab for six weeks starting from July 1st, 2024.

# STUDENT ACHIEVEMENTS



- Ms. Saloni Vats (Batch 2018–2022, EEE) achieved an outstanding All India Rank (AIR) of 129 in the UPSC Examination in the year 2024.
- Abhishek Napa (Batch 2013–2017, EEE) secured an All-India Rank (AIR) of 1004 in the UPSC examination.
- Aryan Mahajan (Batch 2019–2023) secured an impressive All India Rank (AIR) of 105 in the Electrical and Electronics Engineering (EEE) branch in GATE-2024. Currently, Aryan Mahajan is pursuing M.Tech from IIT, Delhi.
- Arpita, a 4th-year student (Batch 2020–2024, EEE), has been honoured with the IEEE Outstanding Student Volunteer Award by the IEEE Delhi Section. Throughout her tenure, she has made significant contributions to the IEEE MSIT Student Branch, serving as General Secretary in 2022, Vice Chairperson in 2023, and currently as an Advisor in 2024. Her dedication and leadership have been instrumental in the branch's success and growth.



- Archit Suri (Batch 2022–2026) and his team secured 3rd position in the 5th Senior Delhi State Tennis Ball Cricket Championship held on 29th–30th March 2024.
- Mayank Shukla (Batch 2023–2027), along with his team, ranked among the top 15 teams nationwide in a competition organized by MasterCard at its Gurugram office. Their developed robot was officially showcased at the MasterCard office, and they received sponsorship for future robotics projects.
- 100DL2024PTC440283) on 24th December 2024. Akashdeep (Batch 2023–2027) founded a startup named Tasterow Food Works with GSTIN 09SFZPS8927GIZU on 19th February 2024.
- Mayank Shukla (Batch 2023–2027) received the Best Collaboration Award at the Business Conclave organized by the E-Cell & Incubation Cell of Shivaji College on 27th February 2024.
- A patent titled “System to Manage Magnetic Detachable Lamp” was granted on 11th January 2024 (Patent No. 497601, Application No. 202211034652) to Mayank, Abhishek, Aman Singhal, and Nidhi Gupta.
- Tanuj Khanna (Batch 2023–2027) launched a startup named SINOVATEX INNOVATIONS PRIVATE LIMITED(CIN: U73100DL2024PTC440283) on 24th December 2024.

# PLACEMENT CORNER

The EEE Department at MSIT is dedicated to providing diverse career pathways for recent graduates. The department actively coordinates with MSIT, Training and Placement Department to organize a variety of placement activities. These activities include aptitude and reasoning tests, group discussions, alumni interactions, and resume writing workshops. They aim to familiarize students with the challenges they may encounter in the job market and prepare them for successful employment. The final-year students of the 2020-2024 batch performed remarkably well in the placement drive. They actively participated in campus drives for approximately 50 companies across both core and IT sectors. Their hard work and dedication paid off, showcasing their readiness for the professional world. A few recruiters this year are companies like - ZS Associates, Corizo, Expert Engineers, and L&T. A total of 30 students were successfully placed in these companies through the campus drive.

## Key achievements are as follows:

1. Priyanka Panda is pursuing M.Tech at NSUT, Delhi
2. Payash Gaur is placed with India Gold at the highest package of 14.8 LPA
3. Aman Tiwari is placed with ZS associates with a package of 13.65 LPA.
4. Manav Pachnanda has cofounded a telecommunication company 'Renovare' Cofounder(Renovare).

# Student Research & Publications

- Sarvagya Mishra, Samarth Kumar, Nidhi Gupta et al. published a paper with title, "Comparative Analysis of a Supercapacitor and Li-ion battery based Electric Vehicle" in the Journal of Information and Optimization Sciences, vol. 45, no.2, pp.515-522, 2024. (ESCI indexed)
- J. Jain et al., "ELECTRA PLAZA - An Automatic Wireless EV Charging Station," VDI-Z Integrate Production, vol. 11, no. 6, pp. 118–122, 2024.
- J. Jain, A. Verma, and H. Pal, "Face Detection using ESP Cam-32," Research and Applications: Emerging Technologies, 2024.
- J. Jain and G. Babbar, "Practices in IoT Security: Applications and Challenges in Technology," Organization Development Journal, 2024.
- J. Jain and A. Akansha, "Gas Leakage Detection System: Design and Implementation," Journal of Emerging Trends in Electrical Engineering, 2024.
- J. Jain, J. Sharma, C. Goel, and D. Raza, "Quantum Technology in 6G," Advancement of Signal Processing and its Applications, 2024.
- J. Jain and B. Brijesh, "Application of Artificial Intelligence in Various Fields," Recent Trends in Control and Converters, 2024.
- N. Gupta, V. Gupta, S. Sikka, D. Manjhi, S. Vashist, and A. Kumar, "Simulation and Hardware Model for Buck Converter and Boost Converter," presented at Renewable Power 2024, Maharaja Agrasen Institute of Technology (MAIT), New Delhi, India, Mar. 28–29, 2024.
- N. Gupta and J. Krishnan, "Digitalization in Operations Management Practices in Organizations," presented at Trinity Institute of Professional Studies, Guru Gobind Singh Indraprastha University (GGSIU), New Delhi, India, Aug. 10, 2024.

## Book Chapters

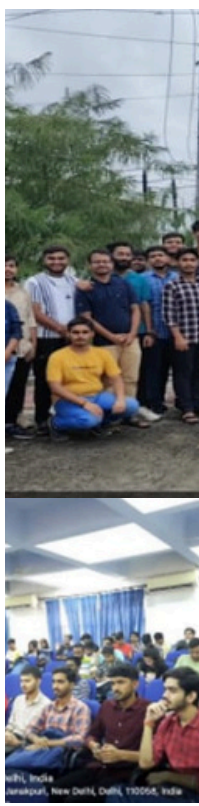
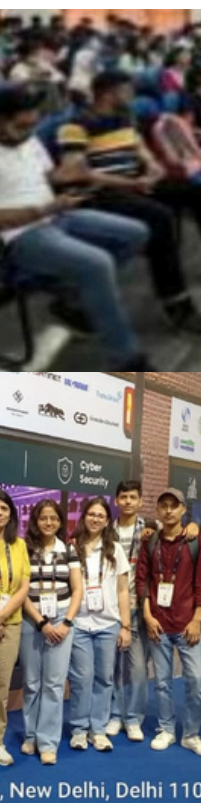
- R. Kamra and S. Chaudhary, "AutoMate: Ubiquitous Smart Home System using Arduino and ESP8266 Module," in The Future of Computing: Ubiquitous Applications and Technologies, 2024, p. 98.
- N. Gupta, S. Vashist, and D. Manjhi, "Development of Air Quality Monitoring System Using IoT," in International Conference on Signal, Machines, Automation, and Algorithm, Springer, Singapore, 2024, pp. 509–518.
- N. Gupta, A. Trivedi, P. P. Terang, and H. Malik, "Unveiling Cyber Threats and Digital Forensics," in Securing the Digital Frontier: Threats and Advanced Techniques in Security and Forensics, Wiley, 2025, pp. 35–57.



## ADIEU 2024









# MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

## Department of Electrical and Electronics Engineering



AFFILIATED TO GGSIPU | NAAC ACCREDITED 'A' GRADE | NBA (CSE, IT, ECE,EEE)  
| APPROVED BY AICTE | ISO 9001:2015 CERTIFIED |

### PATRON

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