



DTE Code: 4151

MSBTE Code: 1683

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

Approved by AICTE, Recognized by Govt. Maharashtra & Affiliated to MSBTE, Mumbai

—POLYTECHNIC—



DEPARTMENT OF ELECTRICAL ENGINEERING

NEWSLETTER

SESSION : 2022-23 (EVEN)

SPARK

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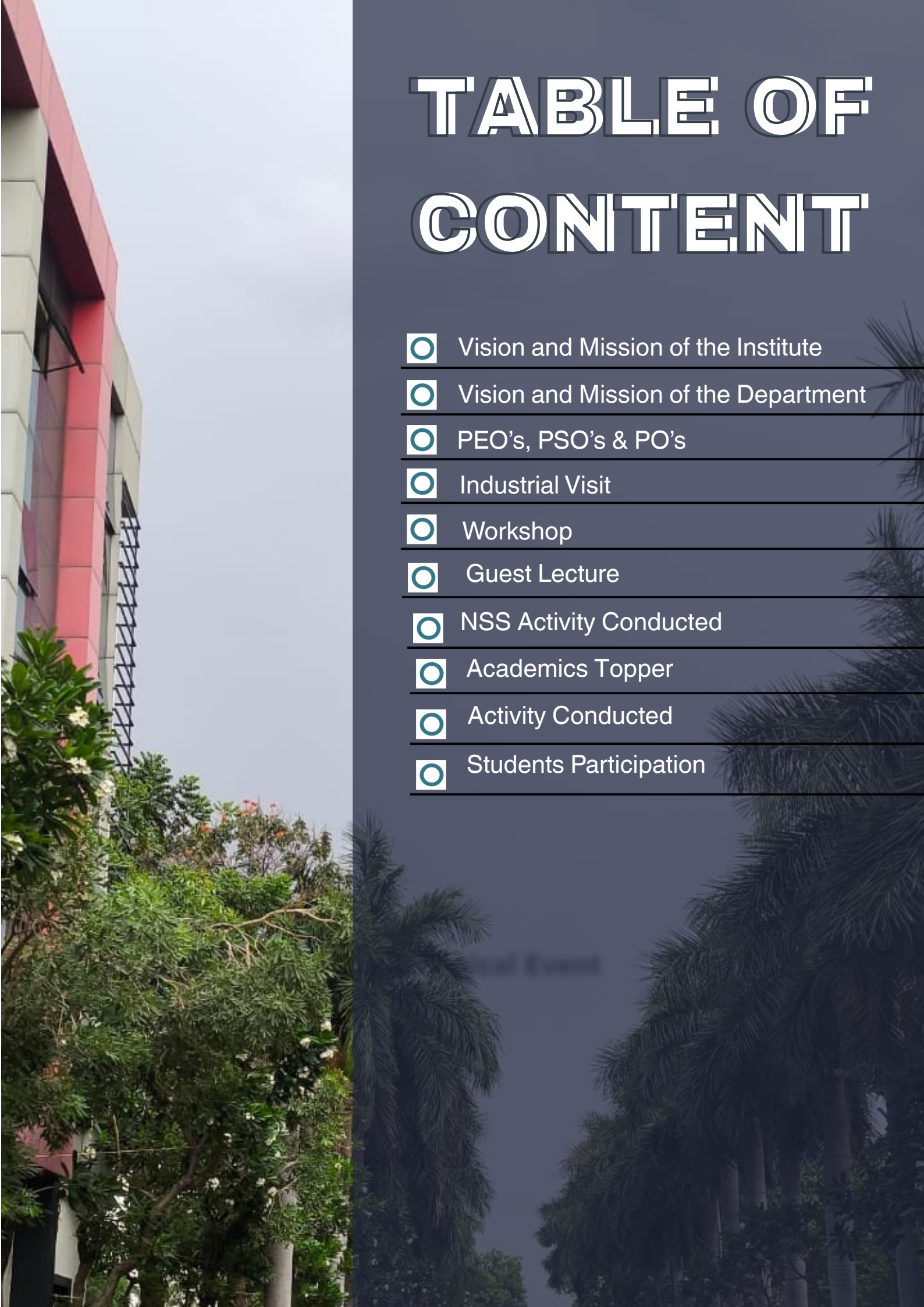
The background of the page is a photograph of a modern building with a red and white facade, partially obscured by lush green trees and palm trees in the foreground. The sky is a clear, pale blue.

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Vision of the Institute

To emerge as a learning Center of Excellence in the National Ethos in Diploma in Engineering.

Mission of the Institute

M1: To elevate the standards of students through ethical practices.

M2: To provide facilities and services to meet the challenges of Industry and Community.

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M3: To ascertain holistic development of the students and staff members by inculcating knowledge and profession as work practices.

Vision of the Department

To Emerge as a learning Centre in the Domain of Electrical Engineering

Mission of the Department

M1: To impart quality technical education through effective teaching & learning process.

M2: To provide learning environment to face societal and industrial challenges of Electrical Engineering

M3: To ensure overall development of students and staff members by inculcating knowledge and professional ethics as a part of lifelong learning.

About TGPCET

Tulsiramji Gaikwad-Patil College of Engineering and Technology Polytechnic (TGPCET) was established in the year 2013 by Vidarbha Bahu-uddeshiyaShikshan Sanstha (VBSS), a registered society. It is a self-financed Private Engineering College, which is affiliated to Maharashtra State Board of Technical Education Mumbai and is approved by All India Council for Technical Education, New Delhi. Also, college is approved by Directorate of Technical Education (DTE), Mumbai, Maharashtra State.

About Department

The Department of Electrical Engineering provides in depth education & prepares its students for all the possible future career & developments in technology. Department has a fine blend of experienced as well as young dynamic enthusiastic personalities as faculty for providing quality education. The specious infrastructure, well equipped laboratories, meritorious students and academically qualified and enthusiastic faculty being the salient features of the Department.

HOD's Desk



Mr. Ganesh Wakte

HOD, EE, Polytechnic

Welcome to the Department of Electrical Engineering of TulsiRamji Gaikwad-Patil College of Engineering and Technology, Polytechnic, Nagpur. We started our journey in the year of 2013. Over the last 11 years, we have grown our Expertise & competence in the core Electrical Engineering curriculum. Electrical Engineering department aims to nurture young talents with technical training to tackle real-world challenges. With a blend of experienced faculty, the department focuses on theoretical and practical approaches. The department has well-equipped laboratories and provides opportunities for collaborative growth through its technical society, "TECHNO-SPARK". The goal of this newsletter is to keep you updated with developments in Electrical Engineering Department of TGPCET Polytechnic. This department is continuously undergoing transformation. New initiatives have been launched related to academics, student affairs, extracurricular activities. The students & faculty members of the department are sincerely participating in various activities organized at institute or at other places. It is elevating to see the sound performance of students. I offer best wishes for future activities. At last, I thank to the editors of SPARK for their sincere efforts & I offer my best wishes to the readers of this newsletter.

PEO's, PSO's & PO's

Programs Educational Objectives:

PEO 1. Provide socially responsible, environment friendly solutions to Computer engineering related broad-based problems adapting professional ethics.

PEO 2. Adapt state-of-the-art Computer engineering board-based technologies to work in multi-disciplinary work environments.

PEO 3. Solve broad-based problems individually and as a team member communicating effectively in the world of work

Programs Specific Outcomes:

PSO 1. Computer Software and Hardware Usage:

Use state-of-art technologies for operation and application of computer software and hardware.

PSO 2. Computer Engineering Maintenance:

Maintain computer engineering related software and hardware system.

Programs Outcomes (PO's):

1. Basic and Discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
2. Problem analysis: Identify and analyze well-defined engineering problems using codified standard methods.
3. Design/ development of solutions: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
4. Engineering Tools, Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
5. Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.
6. Project Management: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
7. Life-long learning: Ability to analyze individual needs and engage in updating in the context of technological changes.

Industrial Visit



Department of **Electrical Engineering** have organized an Industrial visit at Lokmat Press Pvt. Ltd. Butibori, Nagpur, Maharashtra

Aim: To understand the printing, publishing, and production processes of newspapers and gain practical exposure to the working of modern printing technologies at Lokmat Press Pvt. Ltd., Butibori.

Department of Electrical Engineering of Tulsiramji Gaikwad Patil College of Engineering & Technology, Polytechnic, Nagpur student visited "Lokmat Press Pvt. Ltd., Butibori, Nagpur". Lokmat Press is a leading newspaper publisher in the region, known for its extensive reach and credibility. The press facility in Butibori, Nagpur, is equipped with modern technology and infrastructure to cater to the growing demand for news and information in the region

Workshop



Department of Electrical Engineering have organized a Workshop on “AUTOCAD”

Aim: To understand the printing, publishing, and production processes of newspapers and gain practical exposure to the working of modern printing technologies at Lokmat Press Pvt. Ltd., Butibori.

Department of Electrical Engineering of Tulsiramji Gaikwad Patil College of Engineering & Technology, Polytechnic, Nagpur student visited “Lokmat Press Pvt. Ltd., Butibori, Nagpur”. Lokmat Press is a leading newspaper publisher in the region, known for its extensive reach and credibility. The press facility in Butibori, Nagpur, is equipped with modern technology and infrastructure to cater to the growing demand for news and information in the region

Guest Lecture



Aim: To provide students with an in-depth understanding of switchyard operations and safety standards in electrical substations.

Expert Lecture on Switchyard & Safety in Electrical Substation by Mr. Suneel Jain, Assistant Engineer at MSDCL, Nagpur. He covered the basic components of electrical switchgears and emphasized the importance of safety measures in switchyard operations. He also explained the layout and working of substations and guided students through real-life maintenance practices and substation section functions.



Aim: To identify and discuss the common personality traits of successful entrepreneurs. .

The lecture was delivered by Mr. Sachin Raut, a prominent entrepreneur and founder of BABA Digital ADS Pvt. Ltd. The session focused on building an entrepreneurial mindset among students and highlighting key personal qualities for entrepreneurial success

NSS Activity Conducted

TREE PLANTATION PROGRAM



The Department of Electrical Engineering, in collaboration with the National Service Scheme (NSS) Unit and supported by IEI, IEST, and PHONIX, organized a Tree Plantation Program on 14th February 2023 at AIIMS, Nagpur. The activity aimed to create environmental consciousness among students and contribute towards building a greener and healthier ecosystem. The aim of the tree plantation event was to promote environmental sustainability and contribute to a greener future by planting trees in a designated area. The objective of the tree plantation event was to raise awareness about the environment and its preservation.

BOOK DONATION CAMP



The Department of Electrical Engineering, in collaboration with IEl, IEST, and PHONIX, successfully organized a Book Donation Camp on 18th February 2023 at the Central Library, TGPCET, Nagpur. This event was held under the banner of the National Service Scheme (NSS) and aimed at promoting literacy and social awareness through the distribution of books to the underprivileged. The aim of the book donation camp was to collect and distribute books to those in need, promoting literacy and a love for reading. The objective of the book donation camp was to collect books from students, faculty, and other donors, Distribute books to those in need, such as schools, libraries, and individuals and encourage literacy, personal development, and a love for reading in the community.

BLOOD DONATION CAMP



The aim of the blood donation camp was to collect blood units from voluntary donors and promote awareness about the importance of blood donation. The objective of the blood donation camp was to collect blood units from voluntary donors, Promote awareness about the importance of blood donation and encourage voluntary blood donation among the community. During the blood donation camp: Donors were educated about the importance of blood donation and its impact on saving lives. The blood donation process was explained to donors, including eligibility criteria and post-donation care. Donors were informed about the benefits of blood donation, including the opportunity to save lives and improve their own health.

Academics Topper



Kunal Chavare
2nd Semester
73.75%



Ashutosh Sonkusare
4th Semester
78.26%



Kartik Wandhare
6th Semester
78.12%

Activity Conducted

BEYOND THE CLASSROOM: STUDENTS SPEAK

The Solar Air Cooler project is an innovative approach to provide an eco-friendly, cost-effective, and energy-efficient cooling solution, especially for rural and remote areas where electricity supply is limited. The system operates using solar energy, which is harnessed through photovoltaic (PV) panels that convert sunlight into electrical energy to power the air cooler. This eliminates dependency on conventional electricity sources and reduces overall energy consumption. The designed system consists of a solar panel, battery unit, charge controller, and a DC-powered fan with a water circulation mechanism. During daylight, the solar panel charges the battery and simultaneously powers the cooler. The stored energy in the battery ensures uninterrupted operation during cloudy weather or nighttime. The Solar Air Cooler not only helps in maintaining a comfortable indoor temperature but also promotes the use of renewable energy sources, thereby reducing carbon footprint and electricity bills. This project demonstrates the feasibility of integrating solar technology with household appliances, contributing towards sustainable development and green energy initiatives

-KARTIK

Students Participation

PAPER PRESENTATION





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GAIKWAD-PATIL
GROUP OF INSTITUTIONS



Courses we Offer:

- Computer Science & Engineering
- Information Technology
- Civil Engineering
- Mechanical Engineering
- Electrical Engineering
- Electronics & Communication



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