



NEWSLETTER



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Departmental News

Miyawaki Plantation

Shri GS Institute of Technology & Science (SGSITS), commenced its five-day Miyawaki forest plantation drive from 13 March 2024. SGSITS aims to create a dense and biodiverse Miyawaki forest by employing the renowned Japanese method within its sprawling one-acre campus under the guidance of Mr. Alex Kutty M.U., who is in charge of the forest at SGSITS.

Over 1500 individuals congregated on the inaugural day planting over 2000 saplings of various species. The initiative champions the revival of extinct species such as sona patha, garuda tree, kumbhi, gabadi, black rosewood, palash, paddy, khat, anjan, tensa, haldu, kusum, and shami.

SGSITS is developing the first-ever Miyawaki forest on a college campus in Madhya Pradesh, according to sources.

The forest will see a total of 8200 saplings, representing approximately 65 species, take root over the course of the 5-day event.

The college aimed to set a Guinness World Record for developing the 'largest man-made forest inside an engineering college campus. The ambitious project seeks to reintroduce and preserve endangered tree species native to a 40 to 50 kilometres radius around Indore.



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Experts Talk By Mr. Nilesh Vyas

Electrical Engineering Department, SGSITS Indore organized an expert talk session on Research opportunities in Automobile Industry with Artificial Intelligence (AI), which was held on February 19th 2024. Mr. Nilesh Vyas, founder and CEO of Ascentt System Inc. USA, served as the speaker for the event. He brought practical industry experience and expertise in the session. The session was centered on the research work we can do in the automobile industry with the help of AI, which can increase the efficiency of the automobile industry, which was attended by the teachers of SGSITS.



Renewable Energy

On 16/01/24, A Seminar on renewable energy integration and sources was conducted under the guidance of renowned industry expert Mr. Sankalp Ved. This insightful seminar taught us the concepts of power trading, grid connections, frequency adjustments, Energy tariffs, Policies and regulations, Project funding, contract negotiations, and discussed future trends in renewable energy. The seminar highlighted the critical role of renewable energy in tackling climate change. All faculty members of the Electrical Department and students of 3rd year were present at the seminar. Students were highly benefitted from this seminar.



- Dr. Sandeep Bhongade, Prof. Ankit Singh, and Prof. R. S. Mandloi, "Optimizing Load Frequency Control of Micro-grid using Black Widow Optimization Algorithm. IJSMARTGRID, 2024."
- Prof. Anju Dwivedi, "Stroke Disease Detection and Prediction using Decision Tree and Deep Neural Network. IJRAR, June 2024."
- Dr. Sandeep Bhongade, "Intelligent Demand Side Management for Residential Consumer Compose of Electric Vehicle, Energy Storage System and Renewable Energy Source. SPRINGER, May 2024"



Professor M.P.S. Chawla chaired a session at the 5th Springer International Conference on Data Engineering & Applications, organized by IT RGPV and Oriental Institute of Science & Technology, Bhopal, on June 28-29, 2024

IIC Events

IIC Ideathon

Shri GS Institute of Technology & Science (SGSITS) held its Ideathon 2.0 Poster Competition, inviting students from all departments to showcase their innovative ideas. The event, held on February 23, 2024 was organized by the Institution's Innovation Council, with participants presenting posters on the theme of Millennium Sustainable Development Goals (MSDGs). The Poster Exhibition highlighted a variety of groundbreaking ideas, with the top three posters receiving awards for the most innovative idea, best design, and most impactful project. Participants praised the competition for fostering creativity and providing valuable feedback. The event successfully encouraged students to think creatively and contribute to sustainable development initiatives.



IIC Distinguished lecture: WBG Power electronics

IEEE PELS SBC and IEEE student branch, SGSITS Indore organized a lecture on Wide Bandgap (WBG) Power Electronics Systems for Heavy-Duty Vehicles on December 30th, 2023. The event featured Dr. B.N. Singh, a John Deere-Technical Fellow and an IEEE Power Electronics Distinguished Lecturer (PELS DEL), as the keynote speaker. Dr. Singh's presentation covered various aspects of the development of a 200kW 1050 VDC silicon carbide (SiC) dual inverter for heavy-duty vehicles and accelerated SiC inverter technology development, providing attendees with profound insights.

Distinguished Lecture
Topic: Wide Bandgap (WBG) Power Electronics Systems for Heavy-Duty Vehicles
Speaker: Dr. B.N. Singh
Date: 30 Dec. 2023
Time: 10:00AM

BIS Events

Quiz Competition

An intellectually stimulating national level quiz competition was organized at SGSITS Indore on 15th March 2024 by the EED in collaboration with BIS (Bureau of Indian Standards), which is a national standard body of India, responsible for the harmonious development of the activities of standardization of goods. The students of EED participated in the quiz under the invigilation of Prof. R.S Mandloi. The quiz competition was titled as "Quality and Standards - 2". After a great competitive battle, the winners of the quiz competition were Rishabh Tiwari, Abhigyan Purohit and Mayank Singh.



Writing Competition

On February 2nd 2024 a writing competition was held at Shri GS Institute of Technology & Science (SGSITS) in collaboration with the Bureau of Indian Standards. A standard writing competition featuring a variety of engineering-related topics was developed to promote active involvement throughout the competition. Students were allowed to develop their own standards on a particular subject related to their career. Individuals competed against one another in groups. The winners of this writing competition were Abhigyan Purohit, Nishi Raghuvanshi, Deepika Mangrol, Dheeraj Rathod, Gaurav Pandey, Akshat Jain.



CEE Sparktacular

The recent techno-cultural fest also known as Aayam held at our college on February 22nd and 23rd, 2024, was a thrilling event that left an indelible mark on our department. Spearheaded by the Electrical Engineering Club, one of the festival's highlights was Sparktacular, a series of captivating games themed around electrical concepts. From the adrenaline-pumping challenges of Turbulent Rows and Neon Strike to the brain-teasing puzzles of Clue Quest and the precision required in the Buzz Wire, every game tested both intellect and skill. The atmosphere was electrifying as students not only showcased their technical prowess but also bonded over shared enthusiasm for innovation. Apart from the games aspect, freshers who involved, also had good opportunities to interact and network with seniors to gain and absorb their valuable wisdom. Sparktacular also included showcasing the departmental students' latest innovations and projects to higher authorities. The projects varied from "eye number detector", "automatic obstacle avoider car to anti sleep alarm for drivers. Sparktacular not only enriched our understanding of electrical engineering principles but also fostered a sense of mutual trust and fun among participants. It was an unforgettable experience that emphasized the vibrancy and talent within our department, making the fest an overall success and a cherished memory for everyone involved.



CEE Recruitment Orientation

The Orientation session on club recruitment and prospects in electrical engineering conducted by the Council of Electrical Engineers (CEE) began with a warm welcome. A dynamic video showcased the department's innovative spirit, featuring glimpses of past events. The video provided an overview of the department's mission and its goals, emphasizing the importance of teamwork, innovation, and professional growth. The video also featured the department's well-equipped laboratories in the areas of Electrical Machines, High Voltage & Power Systems, Control Systems Engineering, Electrical Measurements, Power Electronics & Drives, microprocessors, and Embedded Systems and each lab expert explained the goals and outcomes of their lab. R.S. Mandloi Sir, a respected faculty member and advisor to the council, took the stage to introduce the various responsibilities of council members; he outlined key roles in event coordination and community engagement, and he also shared anecdotes from past council activities, illustrating how these responsibilities translate into real-world experience. Following Mandloi Sir's words on the aim of the club, senior club members shared their personal experiences and the perks of being a part of the Council of Electrical Engineers.



1st Year Co-curricular Activities

The induction program for first-year Electrical Engineering students, was designed to foster comprehensive growth through a series of four events:

1. **Technical Report Presentation - March 19, 2024:** Students gained confidence and enhanced their ability to present their ideas effectively.
2. **Foundation for Future Success: Navigating Placement Pathways - April 24, 2024:** Students were enlightened by Mr. R.K. Anchaliya on the insights of placements, competition outside college etc.
3. **Psychology Workshop - May 1, 2024:** An enlightening workshop on "Emotional Intelligence Essentials: Unveiling the ABCs of Emotions" was taken by psychologist Shruti Seth wherein students interacted and shared their experiences.



E- Yantra

Our SGSITS team made it to the top 10 in the eYantra Innovation Challenge 2023-24 with their groundbreaking project, called Navi Guide. Navi Guide is a revolutionary mobility cane designed to empower visually impaired individuals with advanced navigation capabilities. Utilizing a unique 8D sound driver, it offers precise feedback on obstacles, transforming how users perceive and interact with their surroundings.

Throughout the competition phase, they were fortunate to receive the valuable mentorship of Mrs. Deepa Avudiappan and Mr. Archit Jain. The team consisted of Paarth Parikh and Rajswi Manjri of Electrical Engineering Department who collaborated to develop Navi Guide. After showcasing their project in Pune, they were invited in IIT Bombay being selected in national finals. The project not only shows innovation but also strives to make a tangible difference in people's lives, especially those of visually impaired.



Know Your Lab

Electrical Workshop

In this lab, students embark on their first hands-on journey into the world of project building. The curriculum is designed to introduce them to essential tools and techniques, including the use of soldering irons and workbenches. By mastering these skills, students gain the confidence to handle various components and circuits effectively. The lab sessions also makes easier to understand the working of everyday appliances such as irons, fans etc. With the help of detailed explanation, students learn the functionality of these devices. This practical exposure increase problem-solving skills and creativity



Dhoomketu

After the successful landing of Chandrayaan-3 on the lunar surface and the exploration of the southern pole of the moon, ISRO solicited innovative ideas and designs of rovers from the youth of India for future missions through the conduct of a space robotics challenge. To provide the opportunity for the students in the area of space robotics, "ISRO Robotics Challenge-URSC 2024 (IRoC-U 2024)" was organised with a tagline of "Let's build a space robot".

SGSITS laid its hopes upon Team Dhoomketu comprising 10 sophomores from distinct branches out of which 2 students were: Admya Jaiswal and Shree Veer Patel from Electrical Engineering Department.



The team was selected for quals round. Out of 1400 teams , 148 teams made it to that feat and one of them happened to be ours.

[Prototype prepared by the Team Dhoomketu]

The Humour Circuit



Source : boredpanda.com

Valuable Contributions :

Prof. H.K. Verma (Dean Academics), Prof. Arun Parakh (HOD, EED), Prof. R.S. Mandloi (Mentor, CEE), Prof. Deepti Rai (Professor Incharge, Publications)
Admya Jaiswal, Rajswi Manjri, Shaily Jain, Sourabh Sankhla, Yash Pratap Singh