

Electrabuzz

2nd

Issue



ELECTRICAL DEPARTMENT
GOVERNMENT ENGINEERING COLLEGE,
SECTOR-28, GANDHINAGAR
NEWSLETTER-24/2(JULY TO DECEMBER-2024)

PREFATORY NOTE

It gives us immense pleasure to introduce our 2nd Issue of “ElectrabuzZ (Use the electric currents to communicate the feelings)” a semiannual newsletter by Electrical Engineering department of GEC Gandhinagar. In an era of information proliferation, news may be available on different platforms, including social media in a variety of ways. However, the newsletter needs to recapitulate and formally organize the prominent news items as a ready reference for the convenience of the stakeholders of the department as well as Institute. We hope that this issue as well as other upcoming issues will serve this purpose. We are thankful to faculties for their constant co-operation in bringing out the newsletter.

H. O. D.'s Message



Prof. Suresh R. Sharda

Head of Electrical Engineering Department

I am happy to note that our Electrical Engineering department is releasing one another issue of Newsletter of this term, enumerating the various activities and achievements of our faculty and students. The department endeavors to produce confident professionals tuned to a real time working environment. The department offers an excellent academic environment with a team of qualified and dedicated faculty members to inspire the students to develop their technical skills and inculcate the spirit of teamwork in them. Commendable job has also been done by the Editorial team in planning for and producing the Newsletter. I also congratulate the entire Electrical engineering department faculties and students for their contribution to department activities and look forward to future developments. Special thanks to the Editorial Board for in house development of this newsletter.

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FACULTY DETAIL



HOD

Prof. Suresh. R. Sharda

**M.E. (ELECTRICAL
ENGINEERING)**

Experience: 26 Years

Prof. Jignasha A. Prajapati

**M.E. (ELECTRICAL
ENGINEERING)**

Experience: 18 Years



Prof. Ashok L. Vaghamshi

**M.E. (ELECTRICAL
ENGINEERING)**

Experience: 15 Years

Prof. Mihir B. Chaudhari
M.Tech. (ELECTRICAL
ENGINEERING)
Experience: 20 Years



Prof. Priyank R. Bhavsar
M.E. (ELECTRICAL
ENGINEERING)
Experience: 17 Years

Prof. Nirav D. Patel
M.Tech. (ELECTRICAL
ENGINEERING)
Experience: 18 Years



Prof. (Dr.) Sunil P. Agrawal
Ph. D. (ELECTRICAL
ENGINEERING)
Experience: 12 Years

DEPARTMENT ACTIVITY

Quiz Competition on "Energy Conservation"

Electrical Engineering Department of GEC Gandhinagar has organized a Quiz Competition on "Energy Conservation" in collaboration with Thermal Power Plant, Gandhinagar (GSECL) on 18th December 2024. Total 60 students have actively participated in this event. Faculty coordinators for this event were Prof. A. L. Vaghamshi and Prof. P. R. Bhavsar.



Technical Visit “Australian Premium Solar (India) Pvt. Ltd.,”

The Department of Electrical Engineering organized a Technical visit at Australian Premium Solar (India) Pvt. Ltd., Tajpur, Prantij, Dist: Sabarkantha, on 05th October 2024. 37 students from semester 3 visited the plant. Understanding the significance of each component in the solar panel manufacturing process and Awareness of the latest technologies in solar energy, such as bifacial solar panels and tracking systems were the main objectives of this visit. Faculty coordinators for this visit were Prof. A. L. Vaghamsi and Prof. N. D. Patel.



Day Celebration “Teachers’ Day”

The Department of Electrical Engineering has celebrated the Teachers’ Day on September 5th with the focus on the theme "Valuing teacher' voices: Towards a new social contract for education." Teacher's Day marks the birth anniversary of Dr. Sarvepalli Radhakrishnan - the first Vice-President and the second President of India. Faculty coordinators for this event were Prof. A. L. Vaghamshi, Prof. P. R. Bhavsar and Prof. N. D. Patel.



Day Celebration “Engineer's Day”

The Department of Electrical Engineering has celebrated Engineer's Day on September 15th. The day is observed to honour the contributions made by Mokshagundam Visvesvaraya in the field of Science and Technology. "Your hard work and dedication have made a significant impact on our lives." is the message from this event. Faculty coordinators for this event were Prof. J. A. Prajapati, Prof. M. B. Chaudhari and Dr. S. P. Agrawal.



STUDENT ZONE

Top 5 Students of Electrical Engineering (2nd Semester-23 Entry)

230130109019 Jagani Manan
Sanjay 8.15



230130109055 Rawat Devanshi
Devendrasingh 8.00



230130109003 Bamta Kishan 7.85



230130109034 Pandit Shivani
Dilip 7.40



230130109037 Parth Kayada 7.35



Student's Achievement

2nd year student of Electrical Engineering department

Mr. Rahul Khara

is the team member of our institute, whose team was the 2nd team who got the investor for their product in the event of 'Startup Weekend Gandhinagar.' Startup weekend is a global level event which is organized globally.

Event was organized in PDEU Innovation and incubation centre on 9, 10 and 11th August, 2024.



Immersing myself in the process of developing startup ideas over such an intense time period, refining an idea in a short span of time has provided me a understanding of what it takes to bring a concept to a successful startup.- Rahul Khara



Student's Achievement Winners at the institute level

- The Ideathon at GEC Gandhinagar saw 30 teams presenting their ideas on 4th September 2024. 2nd year student of Electrical Engineering department Mr. Rahul Khara is the team member who secured 2nd place and earned the opportunity to receive funding from SSIP to further develop their project.



Student's participation in different events at the institute level

- The Ideathon at GEC Gandhinagar saw 30 teams presenting their ideas on 4th September 2024. 2nd year student of Electrical Engineering department Ranjit Shah and his team participated in this SSIP event.



- Joshi Hardikkumar, Parth Kayada, Richa Sharma, Devanshi Rawat, Pandit Shivani and Vekariya Dhvanit, students of Electrical Engineering department participated in the workshop on “Fundamentals of Control System” Organized by Instrumentation & Control Department, Government Engineering College, Gandhinagar on 13-08-2024.



FACULTY ACHIEVEMENTS

- Prof. M. B. Chaudhari participated in NPTEL Online course ‘**Design, Technology and Innovation**’ during **July-Oct 2024** and secured 82% Score (Elite-Silver Certificate).



- Prof. P. R. Bhavsar participated in NPTEL Online course ‘**Smart Grid: Basics to Advanced Technologies**’ during **July-Oct 2024** and secured 83% Score (Elite-Silver Certificate).



FACULTY PUBLICATIONS

- **Dr. Sunilkumar P. Agrawal** published a research paper titled "A hybrid mutational Northern Goshawk and elite opposition learning artificial rabbits optimizer for PEMFC parameter estimation." in the **Scientific Reports 14, no. 1** in November 2024.
- **Dr. Sunilkumar P. Agrawal** published a research paper titled "Adaptive historical population-based differential evolution for PEM fuel cell parameter estimation." in the **Ionics** in November 2024.
- **Dr. Sunilkumar P. Agrawal** published a research paper titled "Precision parameter estimation in Proton Exchange Membrane Fuel Cells using depth information enhanced Differential Evolution." in the **Scientific Reports 14, no. 1** in November 2024.
- **Dr. Sunilkumar P. Agrawal** published a research paper titled "A levy chaotic horizontal vertical crossover based artificial hummingbird algorithm for precise PEMFC parameter estimation." in the **Scientific Reports 14, no. 1** in November 2024.
- **Dr. Sunilkumar P. Agrawal** published a research paper titled "The Quick Crisscross Sine Cosine Algorithm for Optimal FACTS Placement in Uncertain Wind Integrated Scenario based Power Systems." in the **Results in Engineering** in December 2024.
- **Prof Mihir B. Chaudhari, Prof. N. D. Patel, Prof. P. R. Bhavsar and Prof. A. L. Vaghamshi** published a research paper titled "Study of Partial Shading Effect on the Different Photovoltaic Array Arrangements and their Shade Resilience." in the **Journal of Electrical Systems (JES)** in July 2024.
- **Prof Mihir B. Chaudhari, Prof. N. D. Patel, Prof. P. R. Bhavsar and Prof. A. L. Vaghamshi** published a research paper titled "Implementation of Shunt Active Power Filter Using DSP Controller Based on Synchronous Reference Frame for Harmonic Mitigation" in the **Journal of Electrical Systems (JES)** in July 2024.

FACULTY TRAINING

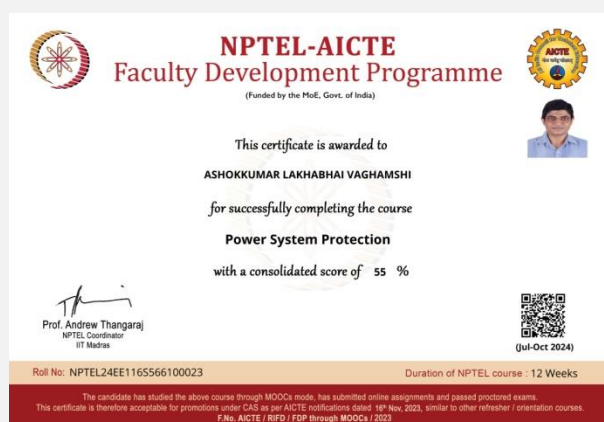
- Prof. J. A. Prajapati successfully completed Industrial training at Sahajanand Laser Technology Limited, Gandhinagar during 22-07-2024 to 03-08-2024.



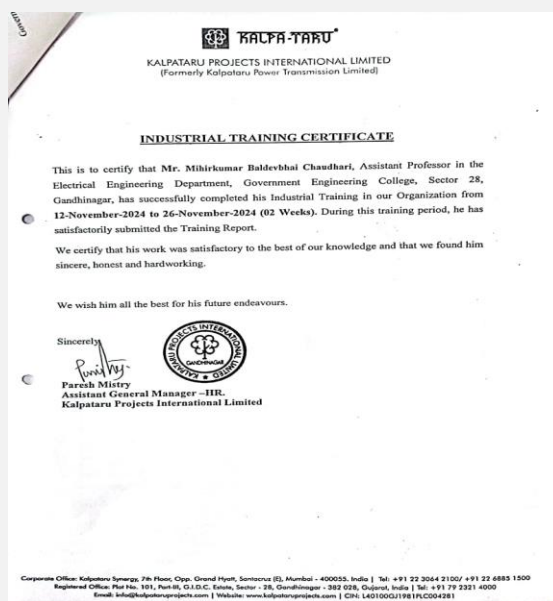
- Prof. A. L. Vaghamsi successfully completed Industrial training at Sahajanand Laser Technology Limited, Gandhinagar during 22-07-2024 to 03-08-2024.



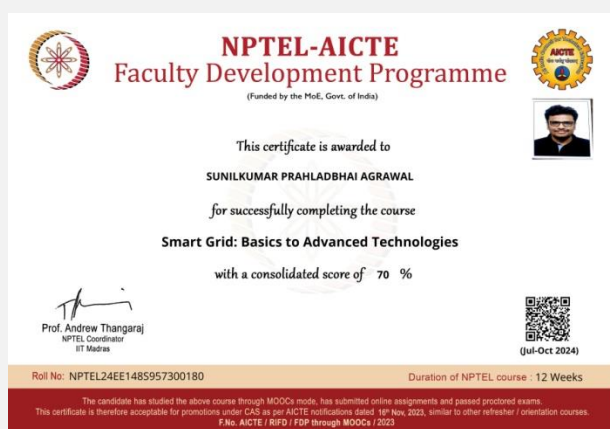
- Prof. **A. L. Vaghamshi** attended One Week FDP on "Design Thinking and Entrepreneurship" during 07/10/2024 to 11/10/2024 at GTU-GIC, GTU Campus, Chandkheda, Ahmedabad.
- Prof. **A. L. Vaghamshi** has successfully completed a 12-week MOOC Faculty Development Program 'Power System Protection' during **July-Oct 2024**.



- Prof. **M. B. Chaudhari** successfully completed a 8-week MOOC FDP on 'Design, Technology and Innovation' on the NPTEL platform during **July-Oct 2024**.
- Prof. **M. B. Chaudhari** successfully completed Industrial training at Kalpataru Projects International Ltd, Gandhinagar during 12-11-2024 to 26-11-2024.



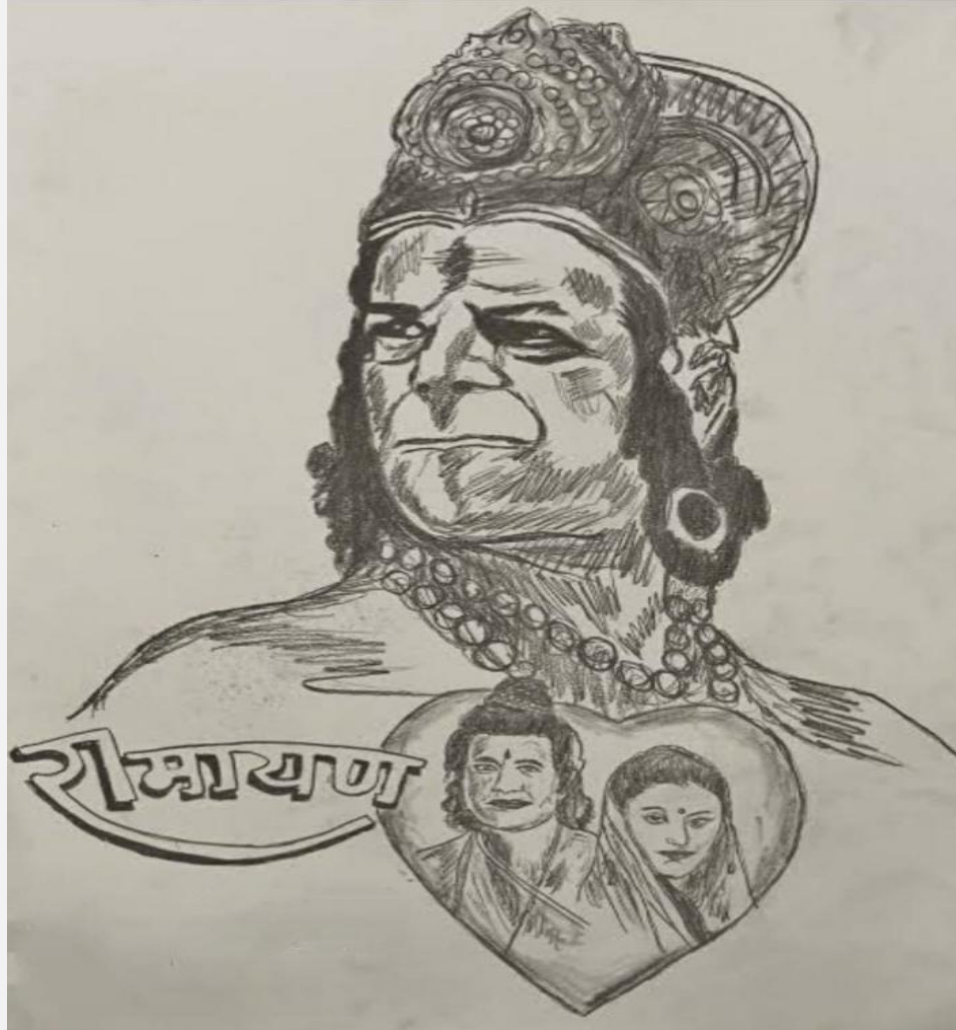
- Dr. S. P. Agrawal successfully completed a 12-week MOOC FDP on 'Smart Grid: Basics to Advanced Technologies' on the NPTEL platform during July-Oct 2024.
- Dr. S. P. Agrawal attended One Week FDP on "Design Thinking and Entrepreneurship" during 07/10/2024 to 11/10/2024 at GTU-GIC, GTU Campus, Chandkheda, Ahmedabad.



- Prof. P. R. Bhavsar successfully completed a 12-week MOOC FDP on 'Smart Grid: Basics to Advanced Technologies' on the NPTEL platform during July-Oct 2024.
- Prof. N. D. Patel successfully completed a 12-week MOOC FDP on 'Smart Grid: Basics to Advanced Technologies' on the NPTEL platform during July-Oct 2024.



CREATIVITY CORNER-SKETCHES



230130109018,

JADVANI DHRUVINKUMAR BHARATBHAI,

Electrical,3rd Sem

CREATIVITY CORNER-POETRY

में
बार बार खड़ा होता हूँ।
संघर्ष की इस प्रतियोगिता में।
हर बार डटा रहता हूँ।
सफलता की आशा में।
हार से भयभीत होता नहीं।
असफलता से घबराता नहीं।
अकसर इस संघर्ष की लड़ाई में
विफल हो जाता हूँ।
लेकिन फिर खड़ा होकर
गीत नया गाता हूँ।

230130109015, GUNANJAY SHRIVASTAVA,
Electrical, 3rd Sem

GLIMPSE OF EVENTS FOR **GAINING SOMETHING BEYOND THE SYLLABUS**



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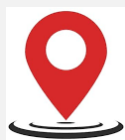
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