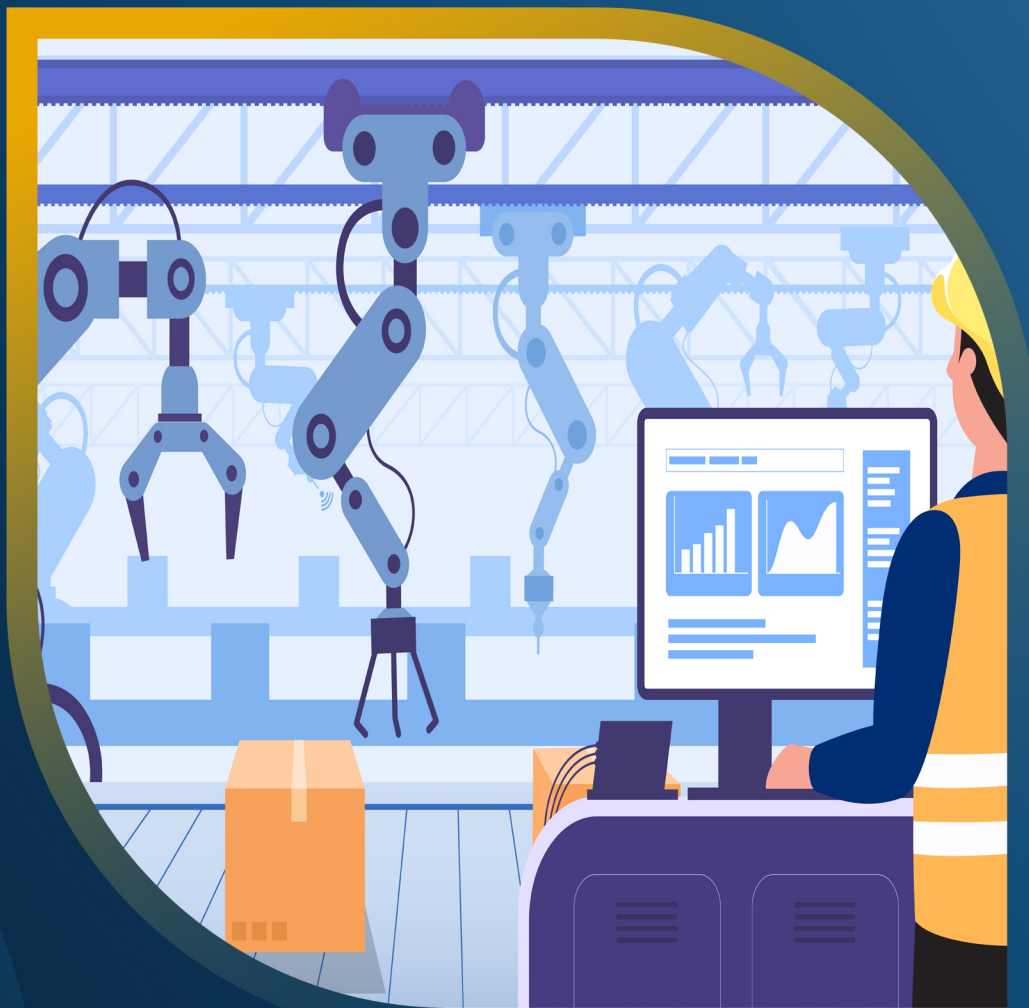




# VIDHYUTVISHWA

NEWSLETTER OF THE ELECTRICAL ENGINEERING DEPARTMENT



**VISHWAKARMA GOVERNMENT ENGINEERING COLLEGE**

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## **Prof. S. N. PANDYA**

**HOD, ELECTRICAL ENGINEERING DEPARTMENT**

Dear all,

I am pleased to announce the launching of VIDYUTVISHWA Vol-06, newsletter of electrical engineering department of VGEC Chandkheda for tenure of 1<sup>st</sup> January, 2022 to 30<sup>th</sup> June, 2022. VIDYUTVISHWA focuses on the achievements, creativity and innovations of our students, faculties and alumni.

Beginning of year 2022 is quite challenging for teaching learning process in engineering. Post COVID-19 lockdown, transition from online to offline teaching learning process was difficult but electrical engineering department articulated this transition very swiftly and we were pioneer in continuing our services and outreach to our students, parents and stakeholders. During this transition back to offline teaching learning process, we maintain the environment of constant learning and progress to achieve our vision. Our department works collectively to create competent and self disciplined technocrats to serve our society. Well equipped laboratories and well qualified faculties provide platform to full fill the industry based skill requirements and to address society problems by modifying existing solutions or by implementing novel solutions. We try to keep our students engaged and utilize their time not only for academics but also in co-curricular activities for their overall development. This newsletter is our small effort to highlight all the technical activities, extracurricular activities, achievements, creativity and innovations of our department.

# ABOUT DEPARTMENT

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The Electrical Engineering Department started in 1994 and offers bachelor of engineering in electrical engineering. The program has intake of 150 students and is designed and updated keeping in view the constantly changing industrial needs, skills and challenges emerging out of new research. The department is very well equipped with laboratory facilities and constantly upgrading available hardware and software facilities to create research/testing environment leading to a great opportunity to learn and progress in different technical domains. The department has well qualified faculties playing major roles in creation of competent & disciplined engineers to serve the nation.



## VISION

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To produce comprehensively trained, socially responsible and innovative electrical graduates to contribute to the society.

## MISSION

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- To develop well equipped laboratories and infrastructure for conducive learning.
- To produce competent and disciplined electrical engineers to serve the nation.
- To help in building national capabilities for excellent energy management and to explore nonconventional energy sources.
- To produce electrical engineers with an attitude to adapt themselves to changing technological environment.
- To enhance entrepreneurship skills through start up.

## PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

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- Develop and conduct appropriate electrical experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- Acquire and apply new knowledge as needed, using appropriate learning strategies through innovation.
- Work independently on a project or as a team leader.
- Get an employment in various government and private sector companies, pursue research and innovation.

## PROGRAM SPECIFIC OUTCOME(PSOs)

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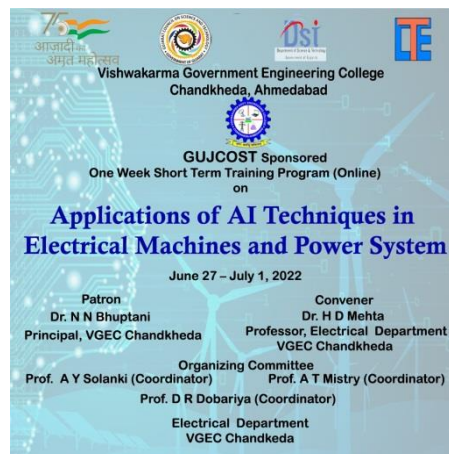
- Use various electrical testing tools and equipment in industry, be an entrepreneur, enroll in post-graduate courses, pursue research and innovation in the field of electrical engineering.
- Use knowledge of various electrical machines and electrical power system in solving complicated electrical circuits and networks by using latest design and simulation tools.
- Use technical expertise and suggest modification in existing electrical systems.



# DEPARTMENTAL ACTIVITIES

## "Applications of AI Techniques in Electrical Machines and Power System"

The **Electrical Engineering Department** in association with Sponsoring Agency GUJCOST – DST has organized One week short term training program on ``**Applications of AI Techniques in Electrical Machines and Power System**” during 27<sup>th</sup> June 2022 to 1<sup>st</sup> July 2022 in an Online mode using MS Teams as a platform for the training program. Experts from academia and industry were invited to make participants aware of real time problems and their solutions in Electrical Power Systems and Electrical Machines based on AI techniques.. The speakers discussed a wide range of problems faced in electrical engineering and their solutions through Artificial intelligence in the real world. A blend of sessions were planned starting from the view point of academic research, some hands-on exercises using different software tools and real world industry insights in the field of AI. The STTP was coordinated by Prof. H. D. Mehta, Prof. A. Y. Solanki, Prof. A. T. Mistry and Prof. D. R. Dobariya. Total 45 participants took active participation in the training program for a week.



# FACULTY SECTION

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## FACULTY DEVELOPMENT

- **Prof. S. N. Pandya, Prof. P. J. Purohit and Prof. D. J. Vaghela** have successfully completed NPTEL MOOC training on "**Electric Vehicles-Part 1**" from 21/02/2022 to 18/03/2022 organized by IIT, Delhi.
- **Prof. H. B. Vaghela** has successfully completed NPTEL MOOC training on "**Leadership and Team Effectiveness**" from 24/01/2022 to 15/04/2022 organized by IIT , Roorkee.
- **Prof. D. V. Makwana** participated in a short term training program on "**Trends in Industrial Automation: Refreshing Past and Focusing Future**" from 13/06/2022 to 24/06/2022 organized by GEC,Gandhinagar.
- **Prof. N. B. Panchal** participated in a short term training program on "**Trends in Industrial Automation: Refreshing Past and Focusing Future**" from 13/06/2022 to 24/06/2022 organized by GEC,Gandhinagar.
- **Prof. Y. B. Bhavsar** participated in a short term training program on "**Applications of AI techniques in Electrical Machines and Power System**" from 27/6/2022 to 1/7/2022 organized by Vishwakarma Government Engineering College, Chandkheda.
- **Prof. N. P. Shah** participated in a short term training program on "**Applications of AI techniques in Electrical Machines and Power System**" from 27/6/2022 to 1/7/2022 organized by Vishwakarma Government Engineering College, Chandkheda.
- **Prof. M. G. Siddh** participated in a short term training program on "**Applications of AI techniques in Electrical Machines and Power System**" from 27/6/2022 to 1/7/2022 organized by Vishwakarma Government Engineering College, Chandkheda.
- **Prof. J. A. Prajapati** participated in a short term training program on "**Applications of AI techniques in Electrical Machines and Power System**" from 27/6/2022 to 1/7/2022 organized by Vishwakarma Government Engineering College, Chandkheda.
- **Prof. N. P. Shah** Participated in a one week online event on "**Enhancing Emotional Intelligence**", organized by Jaipur engineering college and research center,Jaipur.
- **Prof. R. R. Surani** Short term course on "**Condition Monitoring of Power Apparatus adopting Multi Sensor Fusion Technique**" organized by IIT,Madras and sponsored by AICTE.

# CO-CURRICULAR ACTIVITIES

- **Deven Chetanbhai Mistry** (Electrical Engineering Department) participated in **NATIONAL TECHNOLOGY DAY COMPETITION** which was organized on 5<sup>th</sup> and 6<sup>th</sup> May'22 by LD Engineering college in collaboration with INSTITUTE FOR PLASMA RESEARCH. He demonstrated a 3D printer which was made by himself and won the 2<sup>nd</sup> prize in a Technical Model making competition.
- **Shrusti Nitinkumar Bhatiya** was selected as Yoga instructor in **NCC CATC2** camp and performed yoga poses at Sardardham on international yoga day.

## MEDIA COVERAG

### જુજરાત સમાચાર

Dt. 03/07/2022

#### વીજીઈસીમાં એઆઈ વિષય પર ઓનલાઈન તાલીમ યોજાઈ

વીજીઈસીના ઇલેક્ટ્રિકલ ઇજનેરી વિભાગ દ્વારા 'એપ્લિકેશન્સ ઓફ આર્ટિફિશિયલ ઇન્ટેલીજન્સ ઇન ઇલેક્ટ્રિકલ મશીન્સ એન્ડ પાવરસિસ્ટમ' વિષય પર ઓનલાઈન તાલીમનું આયોજન કરવામાં આવ્યું હતું, જેમાં કોલેજના પ્રિન્સિપાલ પ્રો.ડૉ. એન.એન.ભુપતાણીએ કહ્યું કે, આજના સમયમાં અધ્યાપકોએ તકનીકી કૌશલ્ય વર્ધન માટે સતત પ્રયત્નશીલ હોવું જરૂર છે. માર્કેટ અને ઉદ્યોગ વચ્ચેના અંતરને દૂર કરવાની ખાસ જરૂરિયાત છે. પ્રો. એસ.એન.પંડ્યાએ કહ્યું કે, એઆઈનો ઉપયોગ કરીને પાવર સિસ્ટમ્સની વિવિધ સમસ્યાઓ જેવી કે ઇલેક્ટ્રિકલ પાવર સિસ્ટમ લોડપ્લાનિંગ, શેડ્યુલિંગ, ફોરકાસ્ટિંગ તેમજ માઈક્રોગ્રીડમાં એનર્જી મેનેજમેન્ટ વગેરેનું નિરાકરણ કરી શકાય છે.

# JOINING US

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**Prof. S. N. PANDYA**  
(Professor)



**Prof. M. G. SIDDH**  
(Assistant Professor)

## **New joinee to IEl students chapter**

1	200170109077	Akriti Maurya
2	210170109530	Kharadi jatin Ashwinbhai
3	210170109520	Patel Rushabh Vipulkumar
4	210170109509	Divyanshu Jani
5	210170109518	Hadiyal jaydip jashamatbhai
6	210170109519	Jadav Urvi Yashwant bhai
7	210170109502	Shrey Dobaria
8	210170109506	Tanvi Navnitbhai Makwana
9	210170109510	Ami Rajeshbhai Vadher
10	210170109521	Harshil Chiragbhai Solanki
11	210170109505	Abhishek Maheshbhai Mandaliya
12	210170109032	Rushi Patel
13	210170109027	Chaudhary Shankumar Rameshbhai
14	210170109026	Patel Meetkumar Vikasbhai



# ELECTRIC INSIGHT

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## Floating Solar Plant

**Prof. Grishma P Pipaliya**

Assistant Professor

Electrical Engineering Department, VGEC

There has been a visible impact of solar energy in the Indian energy scenario during the last few years. Solar energy based applications have benefited millions of people in Indian villages by meeting their energy needs in an environment friendly manner. Further, solar energy sector in India has emerged as a significant player in the grid connected power generation capacity over the years. It supports the government agenda of sustainable growth, while, emerging as an integral part of the solution to meet the nation's energy needs. India has achieved 5<sup>th</sup> global position in solar power deployment by surpassing Italy.

Recently, National Thermal Power Corporation (NTPC) announced commercial operation of India's largest floating solar plant at Ramagundam in Telangana's Peddapalli district with the capacity of 100 MW. The project spreads over 500 acres of its reservoir. It is divided into 40 blocks, each having 2.5 MW. Each block consists of one floating platform with one inverter, transformer and a HT breaker and an array of 11,200 solar modules. The power is being evacuated up to the existing switch yard through 33kV underground cables. The solar modules are placed on floaters manufactured with high-density polyethylene material that keeps them floating irrespective of water-level fluctuations. From the environment point of view, the main advantage of floating farms are that they do not require land to be acquired for the installation of photovoltaic panels and they are more efficient as the presence of water underneath helps them keep cool. They also reduce water evaporation, thereby saving more water for hydropower generation. (Ref. <https://mnre.gov.in>)



# ACADEMIC ACHIEVEMENT

1 <sup>st</sup> Semester	CPI	3 <sup>rd</sup> Semester	CPI
Patel Janavi Sureshbhai	8.67	Gupta Udit Shankar Dayal	9.02
Satyam Kumar Pandey	8.43	Sukhadiya Het Jayeshkumar	8.97
Rasad Paresh Vinodbhai	8.43	Suthar Suresh Ghevaram	8.92

5 <sup>th</sup> Semester	CPI	7 <sup>th</sup> Semester	CPI
Patel Satishkumar Jesingbhai	9.36	Dave Parth Avinashbhai	9.12
Suthar Vidhi Kishorkumar	8.93	Majithiya Madhav Jayantilal	9.11
Vaibhav Verma	8.79	Jadeja Pruthvirajsinh Dharmendrasinh	8.88



## GATE ACHIEVERS



Rohit Jangid  
(EE)  
GATE Score : 560



Shailesh Jasrani  
(EE)  
GATE Score : 425



Dinesh Haryani  
(EE)  
GATE Score : 315

# WEBINAR

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## Webinar on “Career Opportunities after B.Tech”

The **Electrical Engineering Department** organized a webinar on “**Career Opportunities after B.Tech**” on 7<sup>th</sup> March, 2022. **Mr. S. MM. Trinath** (Motivational Speaker & Faculty at ACE Academy) was the speaker of the session and had discussed the important career opportunities for engineering graduates (GATE, ESE, PSUs Jobs, State Service Commission, IT / Private sector Jobs) and the strategy for competitive exam preparation. More than 50 students had participated in the webinar.

## Webinar on “Building a Climate-Resilient Gujarat Exhibition”

On 22<sup>nd</sup> and 23<sup>rd</sup> February 2022, Electrical Engineering Department VGEC, Chandkheda organized a visit at science city on **Building a Climate-Resilient Gujarat Exhibition** along with Prof. Rozina Surani, Prof. Minaxi Patel, Prof. Jignasha Prajapati, and Prof. Nilam Panchal. Total 21 students have visited this exhibition. Students learnt about usage of electric vehicles which reduces the usage of petrol and diesel which can help to reduce air pollution and Greenhouse Gasses.

# ACCOMPLISHMENTS

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Patel Satish , a student of 6<sup>th</sup> sem Electrical Engineering secured 5th rank in GTU (5<sup>th</sup> sem DEC-2021 Examination) with 9.36 CPI.



Prof. Y B Bhavsar (Electrical Department) has been awarded Ph.D degree in Electrical Engineering on “Congestion management of transmission system under deregulated environment of electrical power system” from GTU in January, 2022.

# PLACEMENT DATA

Triangle Technologies Private Limited 01	Iris Automation 01
Linc Digital Systems Pvt Ltd 01	Torrent Power Ltd (T&D) 06
Adani Enterprise Ltd 08	Amrut Energy Ltd 05
PCB Planet Ltd 04	Vedant Engitech company 06
Atlas coscorp 03	Hitachi-Hirel Power Electronics Ltd 02
LM wind power ltd 03	Zydus Cadila Healthcare 05
Tata Motors Ltd (GAT) 01	



# CREATIVE CORNER



Usha Odedra

6<sup>th</sup> sem EE



Janmesh Patel

4<sup>th</sup> sem EE



Janmesh Patel

4<sup>th</sup> sem EE



Janmesh Patel

4<sup>th</sup> sem EE



Janmesh Patel

4<sup>th</sup> sem EE



Janmesh Patel

4<sup>th</sup> sem EE



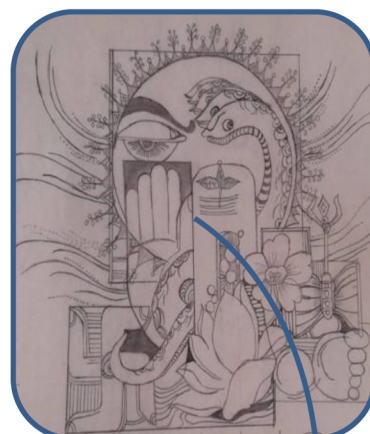
Janmesh Patel

4<sup>th</sup> sem EE



Janmesh Patel

4<sup>th</sup> sem EE



Janmesh Patel

4<sup>th</sup> sem EE



Janmesh Patel

4<sup>th</sup> sem EE



Janmesh Patel

4<sup>th</sup> sem EE

**Editorial Team**

**Prof. Roopal R. Kapadia**

**Prof. Vaibhavi M. Parmar**

**Prof. Grishma P. Pipaliya**

**Designed By**

**Dhrumil A. Shukla**

**(2<sup>nd</sup> Sem, EE)**