





/IDHYUTVISHWA NEWSLETTER OF THE ELECTRICAL DEPARTMENT

A TRANSITION TO CLEAN ENERGY IS ABOUT TO MAKE INVESTMENT IN FUTURE





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ABOUT DEPARTMENT

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

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

MISSION

- To develop well equipped laboratories and infrastructure for conductive 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)

- 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)

- Use various electrical testing tools and equipment in industry, be an entrepreneur, enroll in postgraduate 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.

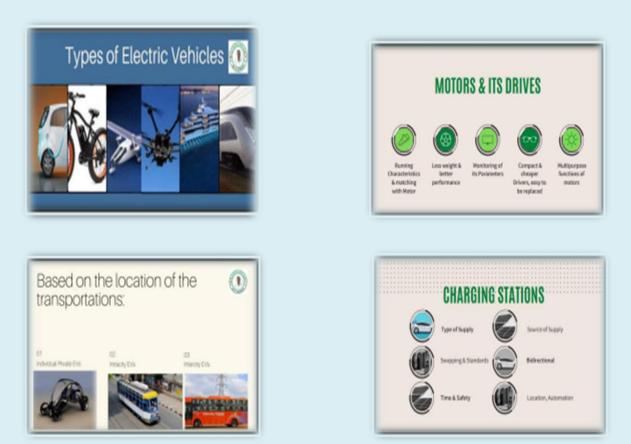


DEPARTMENTAL ACTIVITIES

WEBINARS

ELECTRIC VEHICLE

An expert lecture on **"Electric Vehicle"** was organized by the Electrical Engineering Department under the IEI Students' Chapter on 13th August, 2021 on Microsoft Teams. The lecture was delivered by **Dr.C.D.Upadhyay** Assistant Professor, Electrical Engineering, Government Engineering College, Dahod. The event was aimed to introduce students to electric vehicles and their importance in future and to make the students familiar with the basics of electric vehicles, its various configurations, modern technologies related to EV and challenges in the EV sector. The event was coordinated by **Prof. J.A. Prajapati** and attended by 60 students.



DEPARTMENTAL ACTIVITIES

Fundamentals of Solar Cells and Functional Materials for Its Fabrication

Prof. M L Patel arranged an expert Lecture on **"Fundamentals of Solar Cells and Functional Materials for Its Fabrication"** on 17th March, 2021. The lecture was delivered by **Prof.J.J.Chaudhary**, Assistant Professor, VGEC Chandkheda to 6th semester electrical students. Total 70 students participated in the session.



E - waste Management

To educate and aware the students about safe treatment of e-waste for environment protection, Electrical Engineering Department of VGEC-Chandkheda organized an expert talk on "**E** - waste **Management**" on 24th August, 2021. The expert talk was addressed by **Mr. Aditya Rai**, Social Entrepreneur and a Digital Marketer at e-junk. The event was coordinated by **Prof. R.R. surani** and attended by 49 participants including students and faculty members.





DEPARTMENTAL ACTIVITIES

Basic Aspects of IPR and Patent Search, Filling at Indian Patent Office

The webinar on "**Basic Aspects of IPR and Patent Search**, **Filling at Indian Patent Office**" was organized by Electrical Engineering Department under SSIP on 26th March, 2021 on online platform. The Expert of webinar, **Rujuta Bhatt**, who is Registered Indian Patent Agent and IP Executive at Propinnovate, Vadodara discussed about **Patent and Copyright**, protection of copyright and importance of patent in product development. Total 33 students took part in webinar.

| Prior Art | Bibliographic Search - inventor antigate | Relevance of Patent Search |
|--|---|---|
| | 2State-of Art Search | Information |
| Novelty | >Pre application Search - Novelty | |
| Patent Family | >Antonionity / Price Art Search | TECHNOLOGICAL COMMERCIAL |
| Competitor | >Search for opposition - filing or defending | RELEVANCE RELEVANCE |
| Legal Status > bioletegeneent Search preventive of (Tim Explored) Vokity / >Patent Family Search Positidity | >Intringement Search preventive or detensive (fire fighting) | * 1 |
| | >Patent Family Search | |
| | >Due diligence for merger / assignment | LEGAL |
| | >Legal status | RELEVANCE |
| - | >Comprohensive-all inclusive | |
| Discov | ver top inventors for recruitment | LEGAL RELEVANCE |
| | Find niche markets | Assess patentability of your own inventions |
| | | Avaid possible infringement problems |
| Locate business partners | | Oppose grant of patents found to be conflicting with your |
| kde | entify supplices and materials | own patent(s) or products |
| Monitoe com | spetitors' activities and industry trends | |
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Designing of Automated Systems using Arduino Platform

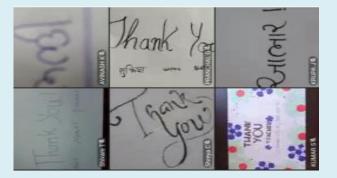
An expert lecture on "**Designing of Automated Systems using Arduino Platform**" was organized by the Electrical Engineering Department for the 5th semester students to introduce students with applications based on the Arduino platform. The lecture was delivered by **Prof. Miral M. Desai**, Assistant Professor at Department of Electronics and Communication Engineering, CSPIT, Charusat, Changa. The session was coordinated by **Prof. J.A. Prajapati** and attended by 60 students.

TEACHER'S DAY CELEBRATION

To mark the birth anniversary of Dr Sarvepalli Radhakrishnan, students of electrical engineering celebrated a **teacher's day** on 6th September, 2021 to express their gratitude and appreciation for their teachers. The event was participated by **148 students**.







IT IS THE TEACHER THAT MAKES THE DIFFERENCE,

NOT THE CLASS ROOM.

INDUCTION PROGRAM

Electrical department organized an orientation program for the first year students on 28th September, 2021. The event was aimed to give an overview of the complete college life, from academics to social activities prior to the beginning of classes and to provide the platform to the entrants to answer their questions which were concerning them about new environment.

NO STRANGERS IN HERE JUST

THE FRIENDS YOU HAVEN'T MET.

FACULTY ACHIEVEMENT

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1. **Prof. A Y Solanki** completed **Master of Engineering in Electrical Power System** from LDRP Institute of Technology and Research in Gandhinagar in September, 2021.

2. **Prof. A Y Solanki** has judged Zaverchand Meghani poetry recitation competition organized by NSS, VGEC in September, 2021.

3. Prof. K.A.Vyas completed Ph.D.

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VGEC ALUMNI ASSOCIATION

An interactive session was organized by **the VGEC Alumni Association** (VAA) of the Electrical Engineering Department on "Being Placement Ready for GNFC and Torrent Power Limited" for the final and pre-final year students on 31st July, 2021, on Google Meet. The session was conducted by Mr. Hitesh Pujara (Electrical Engineer, GNFC) & Mr. Dhaval Mepal (Electrical Engineer, Torrent Power Ltd.). The event was coordinated by Prof. Hiren Zala, Prof. Avani Mistry and Prof. Trushna Shah, and attended by 90 students.



FACULTY SECTION

FACULTY PARTICIPATION

- Prof. A Y Solanki, Prof. S A Agarwal, Prof. T P Shah, Prof. H B Vaghela and Prof. G P Pipaliya participated in Faculty Development Program on "Role of Renewable Energy Sources in Power System" from 5th July, 2021 to 9th July, 2021 organized by Government Engineering College, Patan.
- Prof. D R Dobariya, Prof. R K Ahir and Prof. A T Mistry participated in Faculty Development Program on "Advances in Power system and Protection" from 26th July,2021 to 6th August, 2021 organized by GEC Bharch.
- **Prof. J A Prajapati** participated in Faculty Development Program on "**Matlab for Electrical and Electronics Engineers**" from 12th July, 2021 to 16th July, 2021, organized by NITTTR,Bhopal.
- Prof. D V Makwana and Prof. V M Parmar participated in Faculty Development Program on "Assessment and Utilization of Renewable Energy Resources" organized by GEC, Palanpur from 13th September, 2021 to 17th September, 2021.
- Prof. M.L.Patel attended expert lectures on "Skill, Entrepreneurship Development and Employability: Challenges and Opportunities" on 7th August, 2021. and "Startup Journey of Vorion Scientific" on 4th September, 2021.
- Prof. Rozina Surani attended expert lectures on "Skill, Entrepreneurship Development and Employability: Challenges and Opportunities" on 7th August,2021 organised by Chemical Engineering department, VGEC, "Design Driven Innovation for Faculties - Startup & Entrepreneurship" organised by EC dept under SSIP cell of VGEC Chandkheda on 12th July, 2021 and attended FDP on "Research Insight for Beginners", Organized by Indus University Ahmedabad on 31st July, 2021.
- Prof. R.R.Kapadia participated in ATAL Faculty Development Program on "Smart Energy System" from 4th October, 2021 to 8th October, 2021 organized by IITRAM, Ahmedabad.
- Prof. R.R.Kapadia, Prof. N P Shah and Prof. H N Zala participated in Faculty Development Program on "Teaching without teaching" organized by BAPS, Ahmedabad on 21st October, 2021.
- Prof. R.R.Surani in ATAL Faculty Development Program on "Emotional Intelligence" from 13th December to 17th December, 2021 organized by International Management Institute Bhubaneswar.
- **Prof. H.B.Vaghela** completed NITTTR based MOOC training on "**Soft Skills**" from 26th July 2021 to 15th October, 2021.

EXPERT LECTURE BY DEPARTMENTAL FACULTIES

- > Prof. H D Mehta delivered expert talks on
- **"Optimization of Power Systems Using AI Techniques"** under the banner of GTU Vishwkarma Yojana on 12th February, 2021.
- "Optimization using Genetic Algorithms" in FDP on "Artificial Intelligence
 Techniques with Machine Learning" organized by GEC, Bhuj on 24th February, 2021.
- **"Embedded system Design using Microcontroller**" for students of BPTI Institute, Bhavnagar on 22nd January, 2021.
- **"Future of Online Education"** in FDP on 'Tools and Trends in Online Education System organized by GP, Palanpur on 19th March, 2021.
- > **Prof. D J Vaghela** delivered expert talks on:
- **'Embedded code generation for engineers using MATLAB'** ,on 21st August, 2021 at National Level Workshop conducted by VGEC-Chankheda
- "Embedded Code Generation for Electrical Engineers" on 22nd July, 2021 at Nirma University
- "Role of Power Electronics in EV" on 18th September, 2021 at C.U. Shah Polytechnic.

 Prof. D. R. Dobariya delivered an expert Lecture on:
 "BLDC Motor and Power Electronics Converter" on 23rd July, 2021, organized by Government Polytechnic, Kheda (Raska).

 Prof. A Y Solanki delivered an expert Lecture on:
 "Microprocessor, Microcontroller and its industrial applications" on 5th August, 2021 at RC Technical Institute, Ahmedabad

TRAINING & PLACEMENT CELL

- VGEC, T&P cell organized a webinar on "How to get internship and job by optimizing your linkedin profile" on 17th July, 2021. The session was delivered by Mr. Parth Makwana, Amazon Bestseller Author, Founder of TST, and Harvard Delegate. The session was coordinated by Prof. H N Zala and attended by 80 students.
- VGEC, T&P cell organized a webinar on "MBA as a Career" on 18th September, 2021. The session was delivered by Mr.Pankaj Kumar, B.Tech -IIT Varanasi, MBA-XIMB. The session was coordinated by Prof. H N Zala and attended by 25 students.
- VGEC, T&P cell organized webinar on "Guidance for the Civil Services Examination" on 21st August, 2021 by Experts : Mr Dhruman Nimbale (IPS), Senior Superintendent of Police, Tarn Taran, Punjab and first Gujarati Civil servant to North India and Mrs. Shweta Patel Nimbale, Former Chief Municipal Officer and Mamlatdar, and Career guide for Civil services. The session was coordinated by Prof. H N Zala.

PLACEMENT

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Umang Doshi (Electrical) 2020 batch is selected as Business Development Administrator (BDA) in one of the fastest growing EduTech giant **BYJU'S**, a 5.9 Billion USD (43512 Cr) MNC.

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ALUMNI ACHIEVEMENT

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VGEC Alumni Nilrajsinh Chauhan, Akshay Parmar and Khushbu Dani got appointed as Assistant Engineer (ELE) (Class II, R&B Department) securing 1st, 3rd and 6th rank respectively. VGEC alumni have grabbed 3 out of 8 positions

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STUDENT ACHIEVEMENT

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- **Bhatiya Shrusti Nitinkumar**, 1st year Electrical student, has been selected in **National kabaddi team**.
- Dabhi Nikhil Gautambhai (180170109014) played All india 7-A side National football championship at Nainital, Uttrakhand from 24th Oct to 31st Oct, 2021.
- Dabhi Nikhil Gautambhai (180170109014), an NCC cadet, was selected for National Trekking Camp which was held at Rajpipla District from 26th Nov to 4th Dec, 2021.



MOMENTS OF PRIDE

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Shubham Aherwal (6th semester, Electrical student) represented Gujarat in the prestigious Republic Day Camp 2021 as an NCC cadet from 20th Dec, 2020 to 29th Jan, 2021 held in Delhi. He had **marched as a part of Gujarat Contingent** in front of the **Honourable Prime Minister of India** in the PMs rally on 26th Jan, 2021 at Cariappa Parade Ground, Delhi.











ACADEMIC ACHIEVEMENT

Dhara Tushar Vilasi (170170109123) scored 687 in GATE 2021 with All India Rank 1001.



STUDENT PARTICIPATION

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Aayush Ujal, 7th semester Electrical Engineering, is a team member of **GTU ROBOTICS club**. His team secured **2nd** and **3rd** place in **DD national robocon event** on 18th august, 2021 and will be representing India at **Abu robocon international** event on 12th December, 2021.

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So CS

Deven Mistry, 3rd semester Electrical Engineering and **Dev Lathigra**, 3rd semester EC, have made a **3-D printer 'KRIYETA'**. It is cost effective, accurate, efficient and noise free. During its upgradation, some of its parts are made using this 3-D printer itself. The 3D printer is manufactured completely at home and has a warranty for almost all the parts.

