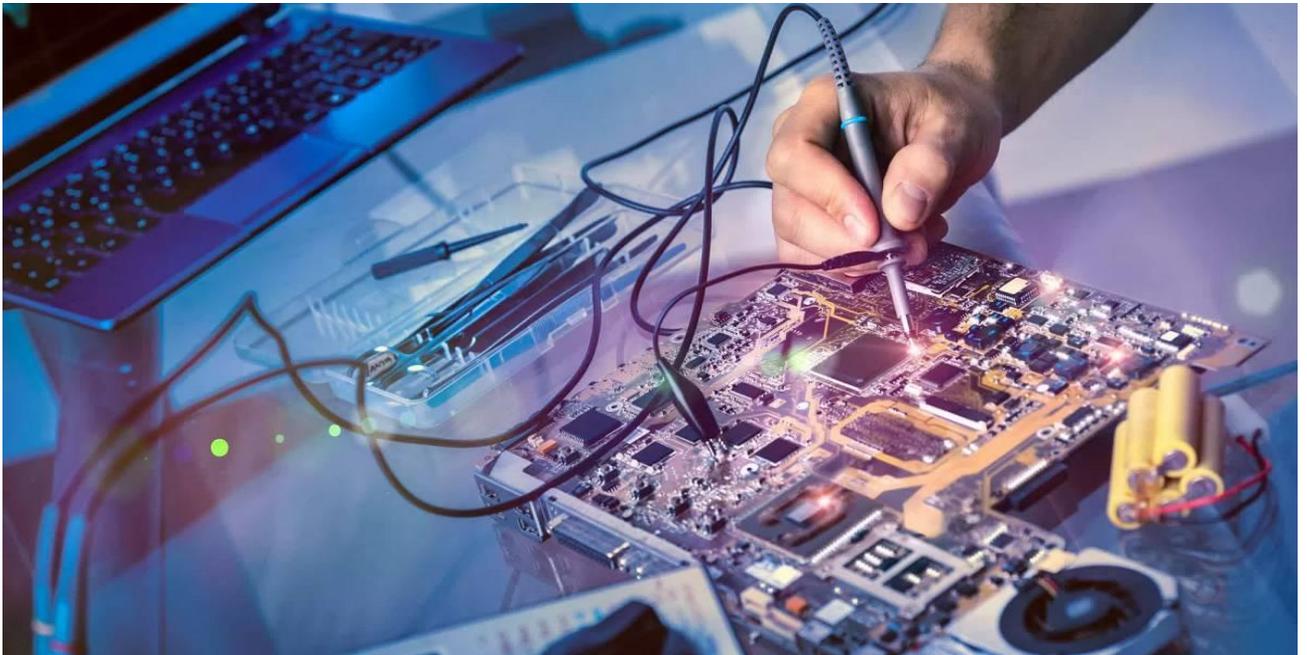




**ELECTRICAL ENGINEERING DEPARTMENT
GOVERNMENT ENGINEERING COLLEGE,
MODASA**



ELECTROZINE-2023



प्रार्थना



हे शारदे माँ, हे शारदे माँ
अज्ञानता से हमें तार दे माँ,
तू स्वर की देवी है संगीत तुझसे,
हर शब्द तेरा है हर गीत तुझसे ।
हम हैं अकेले हम है अधुरे,
तेरी शरण में हमें प्यार दे माँ ॥
हे शारदे माँ, हे शारदे माँ.....
मुन्नयों ने समझी मुन्नयों ने
जानी,
बेदों की भाषा पुराणों की बानी ।
हम भी तो समझें हम भी तो
जाने,

ABOUT THE MAGAZINE

This magazine aims to focus on the Department of Electrical Engineering of GEC Modasa, where various activities are being conducted among students and faculties. It also dives into the extraordinary talent among the students who do their level best in their academics as well as broadcast their inner talents and hobbies to enhance the glory of the Department.

INDEX

<i>SR. NO.</i>	<i>CONTENTS</i>	<i>PAGE NO</i>
<i>1.</i>	<i>VISION AND MISSION</i>	<i>1</i>
<i>2.</i>	<i>PRINCIPLE'S DESK</i>	<i>2</i>
<i>3.</i>	<i>HOD'S DESK</i>	<i>3</i>
<i>4.</i>	<i>ABOUT THE DEPARTMENT</i>	<i>4</i>
<i>5.</i>	<i>ABOUT THE COURSE</i>	<i>5</i>
<i>6.</i>	<i>FACILITIES</i>	<i>6</i>
<i>7.</i>	<i>FACULTY AND STAFF</i>	<i>7</i>
<i>8.</i>	<i>TRAINING ATTENDED BY FACULTY</i>	<i>8</i>
<i>9.</i>	<i>DEPARTMENTAL ACTIVITIES</i>	<i>9</i>
<i>10.</i>	<i>G-20 ACTIVITIES OF THE DEPARTMENT</i>	<i>36</i>
<i>11.</i>	<i>INDUSTRIAL VISITS</i>	<i>47</i>
<i>12.</i>	<i>ALUMNI MEET 2023</i>	<i>59</i>
<i>13.</i>	<i>STUDENT SECTION</i>	<i>64</i>

VISION

To thrive for excellence in the field of Electrical Engineering by imparting quality education that produces skilled, innovative and ethical engineers to meet the needs of academia, industry and society.

MISSION

- To provide an effective Teaching -Learning environment to acquire skills and knowledge in the field of Electrical Engineering.
- Strengthen industry institute interaction to enable the students to work on innovative and real time problems.
- To foster a culture of entrepreneurship amongst the students.
- To instill values in students for lifelong learning and service to the society.

Program Educational Objectives (PEOs)

The Graduates will be able to

- Design, model, analyze and provide appropriate solutions to the industry-based problems.
- Demonstrate entrepreneurial skills and lifelong learning during the career.
- Adapt themselves with the new technological challenges.
- Exhibit professional leadership skills imbining ethical practices.
- Contribute idea with effective communication and work in a team to develop projects and plans.

Program Specific Outcomes (PSO)

- PSO 1: Utilize the domain knowledge cultivated from courses of Electrical Engineering encompassing Analysis, Control, Protection, Design of Electrical Machines and Power Systems.
- PSO 2: Evaluate the existing system and provide technical solutions to meet the societal needs.

PRINCIPAL'S DESK



Dear Students & Faculty members,

Warm greetings to all students and faculty members of this institute. I have joined this institute as a principal from 1st, June, 2019. Before that I served here as a Professor & Head of Applied Mechanics Department for about four years. Hence, I am quite aware about strength and weakness of this institute. The institute has grown by improving quality and quantity in terms of academic activities as well as extracurricular activities in the last decade. But there is always a scope for improvement. Hence with the effort of all students, faculties and staff, we wish to place the institute to the next level of success.

Today the world is accelerating very fast due to rapid technological developments. Hence it is very difficult to impart engineering education in a conventional classroom method. We insist frequent visit to industries, project-based learning, innovative way of teaching learning, pedagogy etc. for making engineering education more meaningful and excited. The institute has very good, qualified, sincere and dedicated faculties as well as very well-developed laboratories in all courses it runs. Hence students are requested to take the maximum benefits of the knowledge available from the campus for capacity building of the nation.

Due to technological developments, there is boom across the globe regarding reduction in jobs and due to increasing population there is a cut-throat competition. Hence there is a lot of expectation from the society that engineers should become job giver or job creator rather than job taker. Our Hon'ble Prime Minister has also acted on this issue by initiating various missions like Make in India, Digital India, Skill India, Start Up India etc. I urge all engineering students to put sincere efforts to the best of your capacity to succeed in various mission of our Hon'ble Prime Minister in reducing the problem of unemployment. Institute provide all sorts of help in initiating your start up and making you successful entrepreneur. The only thing you need is, to develop out of box thinking, hard work and stop not till the goal is reached.

HEAD OF THE DEPARTMENT'S DESK



Greetings!

I take the privilege to welcome you all to this new edition of Electro zine. Electro zine is a barometer of the activities taking place in the department and the achievements of students/faculty of the department.

The strength of Electrical engineering Dept, is well qualified and dedicated faculty with good infrastructure facility. The faculty in the department is of the opinion that the individual diligence, quest for knowledge and excellence and hard work by the students in the right direction play a crucial role in his/her success. The students are motivated to take maximum advantage of the knowledge in the department. A number of co-curricular and extra-curricular activities take place in the department to harness the potential and talents of students.

The department provides an environment where teaching and learning process is supplemented with critical thinking and problem-solving skills that would help the students mold themselves to become competent in the engineering field and thus serve the society.

I appreciate and acknowledge the zeal and enthusiasm of the students who have worked towards the making of this magazine. My heartfelt gratitude to them.

All the best to my students!

ABOUT THE DEPARTMENT

It is the very first building entering the campus. This department has various laboratories in the areas of Basic Electrical, Microprocessor, Electrical Machine Electrical Measurement, Power Electronics, Computer Laboratory, High Voltage, and Switchgear & Protection Laboratory. The Department has an excellent Computer Centre. This department has laboratories in the field of Electrical Measurement, Electrical machines, Power systems, Microprocessors, High Voltage Engineering, Electronics, and Control. It looks after the electric service/maintenance of the campus.

ABOUT THE COURSE

Electrical engineering, one of the core courses of engineering discipline deals with the study of the design, development, and maintenance of electrical systems and their components, ensuring quality , safety , reliability, and sustainability The course focuses on the manufacturing of electrical equipment used in a number of sectors including construction and building and the production and distribution of power. Students pursuing electrical engineering study about semiconductors and microprocessors. The undergraduate course will award a B . Tech / B . E . degree and the postgraduate course , an M . Tech . An electrical engineer is someone who designs and develops new electrical systems , solves problems and tests equipment . They study and apply the physics and mathematics of electricity, electromagnetism and electronics to both large and small scale systems to process information and transmit energy . They work with all kinds of electronic devices , from the smallest pocket devices to large supercomputers An electrical engineer is someone who designs and develops new electrical consoles problems and tests equipment . They study and apply the physics and mathematics of electricity , electromagnetism and electronics to both large and small , scale systems to process information and transmit energy . They work with all kinds of electronic devices , from the smallest pocket devices to large supercomputers .

Facilities

- **Basic Electrical Lab**
- **Electrical Machine Lab**
- **Electrical Measurement Lab**
- **Instrumentation Lab**
- **Digital Electronics Lab**
- **PLS and DSP Lab**
- **Microprocessor Lab**
- **Switchgear and Protection Lab**
- **Basic/Analog Electronics**
- **Power Computation Lab**
- **High Voltage Lab**
- **Control Lab**

FACULTY & STAFF

Prof. V.J.Updhyay	Professor and Head of the Department	Prof. T.A.Chaudhri	Assistant Professor
Prof. M. J. Patel	Associate Professor	Prof. C. K. Bariya	Assistant Professor
Prof. U.L.Mackwana	Assistant Professor	Prof. R. K. Kapadia	Assistant Professor
Prof. N. V. Upadhyay	Assistant Professor	Prof. S. V. Banker	Assistant Professor
Prof. J.B.Pujara	Assistant Professor	Prof. D.U.Thakar	Assistant Professor
Prof. K. K. Bhatt	Assistant Professor	Prof. H.S.Pandya	Assistant Professor
Prof. T.P.Shah	Assistant Professor	Shri. S. J. Patel	Electrician

Training Attended by Faculty

Sr. No.	Name of Faculty	Training Title	Starting Date of Training			Ending Date of Training		
			Day	Month	Year	Day	Month	Year
1	Kaushal K. Bhatt	“Applications of AI techniques in Electrical Machines and Power System”	27	JUNE	2022	1	JULY	2022
2	Dr.V.J.Upadhyay	Applications of AI techniques in Electrical Machines and Power System	27	JUNE	2022	1	JULY	2022
3	Trushna P Shah	Application of AI techniques in Electrical Machines and Power System	27	June	2022	1	July	2022
5	N.V.Upadhyay	58th Faculty Development Program on Design Engineering(Level 1)	24	April	2023	29	April	2023
6	Darshan U. Thakar	Emotional Intelligence in Teaching and Learning	16	January	2023	21	January	2023
7	JIGNESHKUMAR BALDEVBHAI PUJARA	Power Distribution Operation and planning	23	January	2023	14	April	2023

Departmental Activities

Name of Event: " Summer Internship Expo"

Date of Webinar: 15/07/2022

Government Engineering College, Modasa, Electrical Engineering Department has organized an event of Internship Expo for 7th-semester students, and the date of the event was 15/07/2022. and the duration of the webinar was from 011.00 A.M. to 1.00 P.M. There were 116 participants. The students discussed the various activities did during the 15 days of the internship. At the end of the internship expo, students have submitted a total of 12 documents as proof of their internship. The hod sir and various faculties have evaluated students' internships.



**GOVERNMENT ENGINEERING COLLEGE, MODASA
ELECTRICAL ENGINEERING DEPARTMENT**

ORGANIZE

SUMMER INTERNSHIP-EXPO-2022

Date: 15/07/2022, Friday
Time: 11 a.m. Onwards
**Place: Electrical
Department, GECMEED**

Patron Dr. B.J.Shah Principal, Gec- Modasa
Convener Dr. V.J.Upadhyay HOD-GECM-EED
Faculty Co-ordinator Prof. Darshan U. Thakar Prof. H.S.Pandya Asst.Prof.-GECM-EED

Name of Event: " Introduction to Electric Propulsion System of Marine Vessels"

Date of Webinar: 28/07/2022

Electric Propulsion System of Marine Vessels is the one of the research topic for electrical engineering students. To aware about it, Government Engineering College, Modasa, Electrical Engineering Department has organized an event of expert talk for 7th-semester students, and the date of the event was 28/07/2022. and the duration of the talk was from 012.00 P.M. to 1.30 P.M. There were 70 participants. The topic was "Introduction to Electric Propulsion System of Marine Vessels". The key Speaker was Prof. Priyesh Chauhan from IITRAM. The electrical vehicles are the future technology and, in this expert, talk the possibility of exchange the conventional vehicles with electric vehicles were discussed. At the end of the session, the doubts regarding to topic were cleared. The whole session was very interactive and students got lots of knowledge by attending the lecture.



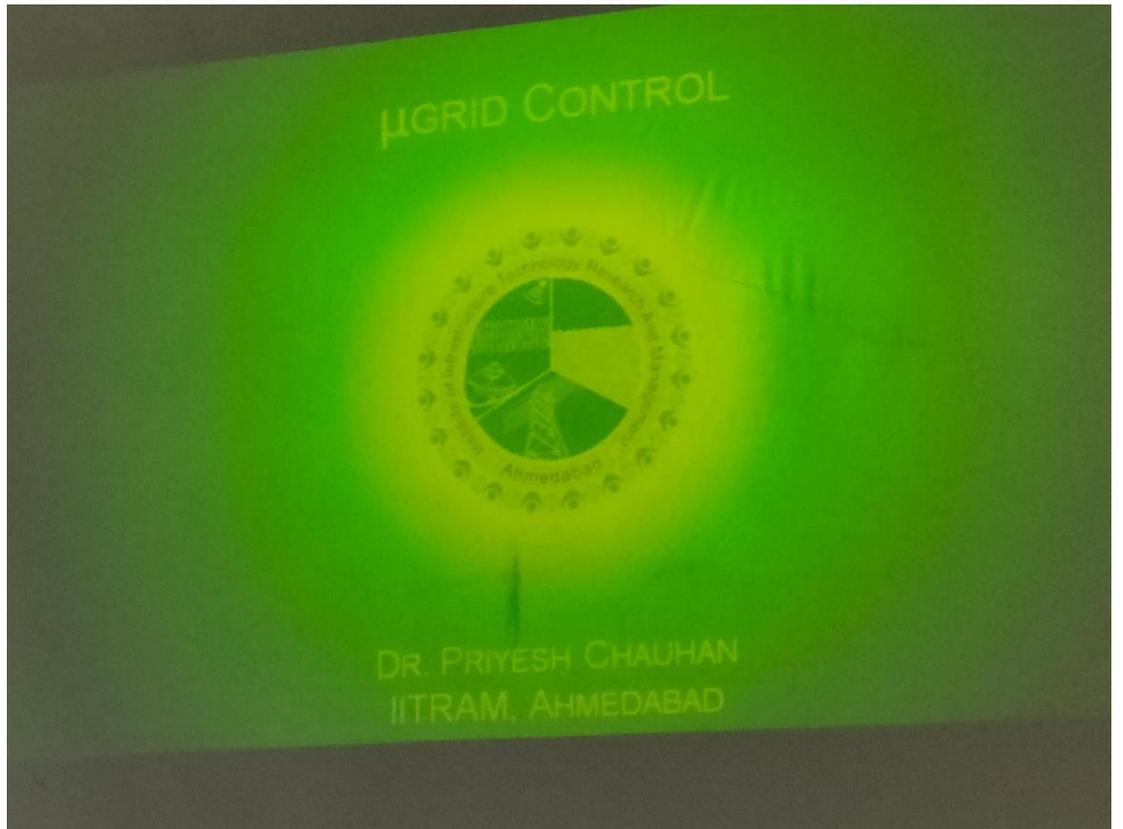


Name of Event: " SMART GRID TECHNOLOGY"

Date of Webinar: 28/07/2022

Smart Grid is an Electrical Grid with Automation, Communication and IT systems that can monitor power flows from points of generation to points of consumption (even down to appliances level) and control the power flow or curtail the load to match generation in real time or near real time. Smart Grid is also one of the research topics for electrical Engineering Students. Government Engineering College, Modasa, Electrical Engineering Department has organized an event of expert talk for 7th-semester students, and the date of the event was 28/07/2022. and the duration of the talk was from 012.00 P.M. to 1.30 P.M. There were 60 participants. The topic was "SMART GRID TECHNOLOGY". The key Speaker was Prof. Priyesh Chauhan from IITRAM. The electrical vehicles are the future technology and, in this expert, talk the possibility of exchange the conventional vehicles with electric vehicles were discussed. At the end of the session, the doubts regarding to topic were cleared. The whole session was very interactive and students got lots of knowledge by attending the lecture.











Name of Webinar: " AI for ALL "

Date of Webinar: 08/07/2022

"AI for ALL" Program was scheduled for 8/7/22, 10:30 AM onwards. A total of 36 students in the 2nd semester and 11 faculty members of the electrical department participated in the event.

AI For All' is a self-learning online program designed to raise public awareness about Artificial Intelligence. It aims to demystify AI for people from all walks of life – a student, a stay-at-home parent, a professional in any field, a senior citizen - basically, anyone interested in getting acquainted with it and wanting to build a 'Digital First Mindset'

The link of the programme were listed below for online participants

Join Zoom Meeting – Faculty Members: <https://bit.ly/AIFORALL8JUL>



The poster features logos for Digital India, Government of India, Ministry of Education, and Intel at the top. The main title is "AI For All Orientation Session". Below it, a blue box states "A unique public awareness program around AI". The text continues: "Directorate of Technical Education, Education Department, Government of Gujarat is organizing AI For All Orientation Session". An image shows a man and a woman looking at a laptop with a network diagram overlay. Below the image, it says "Virtual event organised by" followed by the Directorate of Technical Education, Government of Gujarat. A box mentions the event will be graced by "Shri. Kuberbhai Dindor, Hon'ble Minister of State, Higher and Technical Education, Legislative and Parliamentary Affairs." The date and time are listed as "July 8, 2022, 10:30 AM Onwards". A blue box at the bottom provides the "Youtube Link : <https://bit.ly/AIFORALLJUL8>". The JAYS FOUNDATION logo is in the bottom right corner.



Name of Event: "Tree Plantation Drive"

Date of Webinar: 29/07/2022

Trees are of invaluable importance to our environment and to human well-being. They give us clean water to drink, air to breathe, shade, and food for humans, animals, and plants. They provide habitats for numerous species of fauna and flora, firewood for cooking and heat, and materials for buildings and places of spiritual, cultural, and recreational importance. Trees are so important for the global environment and the health of the species that live there, and they need our unconditional care and protection. To realize the importance of Tree Plantation Government Engineering College, Modasa has organized an event Tree Plantation Drive and the date of the event was 29/07/2022. The faculties and students have participated in a Tree plantation drive and planted one tree in the department and take an oath to take care of that tree for 1 year and then transfer it to their seniors to take care of the same.





Name of Workshop: " EFFECTIVE TECHNICAL WRITING FOR DOCUMENTATION"

Date of Webinar: 12/07/2022

Government Engineering College, Modasa, Electrical Engineering Department has organized a workshop on " EFFECTIVE TECHNICAL WRITING FOR DOCUMENTATION, and the date of the webinar was 12/07/2022. and the duration of the webinar was from 011.00 A.M. to 1.00 P.M.. There were 35 participants. The main focus of the webinar was how to write a technical report, and how to effectively represent work via PPT. The details regarding references, English grammar, and plagiarism are discussed. The **Key Speakers** were **Dr. H.S.Pandya (PowerPoint Presentation)** **Prof. D.U.Thakar(Word Documents)**. At the end of the session, participant certificates were distributed.



**GOVERNMENT ENGINEERING
COLLEGE,MODASA
ELECTRICAL ENGINEERING DEPARTMENT**

**ORGANIZE
A WORKSHOP ON
EFFECTIVE TECHNICAL WRITING FOR
DOCUMENTATION**

**Date: 12/07/2022, Tuesday
Time: 11 a.m. Onwards
Place: Seminar Hall, Electrical Department, GECMEED
Key Speaker: 1. Dr. H.S.Pandya(PowerPoint
Presentation)
2. Prof. D.U.Thakar(Word Documents)**

Patron Dr. B.J.Shah Principal, Gec- Modasa
Convener Dr. V.J.Upadhyay HOD-GECM-EED
Faculty Co-ordinator Prof. Darshan U. Thakar Prof. H.S.Pandya Asst.Prof.-GECM-EED





Name of Event: " GROUP DISCUSSION COMPETITION"

Date of Event: 21/09/2022

Time:-3.00 p.m. to 5.00 pm

Venue :7202,Seminar Hall (Electrical Department)



GOVERNMENT ENGINEERING COLLEGE,MODASA
organize

GROUP DISCUSSION COMPETITION

AS A PART OF CLIMATE CHANGE YOUTH OUTREACH PROGRAMME,

Date:-20/09/2022

Time:-3.00 p.m. to 5.00 pm

Venue :7202,Seminar Hall
(Electrical Department)

Expected Topics for GD

Energy Storage

Battery Operated Vehicle

Water Recycling

Waste Management

Single Use Plastic

Registration Link:<http://tiny.cc/5oazuz>



Coordination:

Prof. D.U.Thakar EE (jayshreeramdarshan@gmail.com)

Prof. K.R.Patel EC (ketu@gecmodasa.org)

Note: Winners will be awarded by Govt. of Gujarat, Activity will be considered in 100 Points GTU.

As a part of the CLIMATE CHANGE YOUTH OUTREACH PROGRAMME, Government Engineering College, Modasa has organized an event of GROUP DISCUSSION COMPETITION.

Topics for Group discussion were Energy Storage, Battery Operated vehicles, Water Recycling, Waste Management, and Single Use of Plastic.



There were 34 participants. The competition was divided into two rounds. In the first round, all the students were divided into five groups and those groups discussed together and among them, the best 10 students were selected. In the second round, 10 students have discussed individually and the top three students were selected.



Jury members of the events were Dr. V. J. Upadhyay, and Prof. C. R. Parekh, AT the end of the competition Dr. V. J. Upadhyay guide the students in the effective group discussion and Prof. C. R. Parekh explain the positive and negative points of the students while group discussion.



Prof. D.U.Thakar and Prof. K.R.Patel were coordinators of this event. The event was started by Prof. D.U.Thakar , by explaining the rules of the event. The event was closed by Prof. K.R.Patel with a vote of thanks.

The winners of the event were

1. Gaurang Khaneja
2. Mohammed Farzaan Faez
3. Sonali Gupta

Name of Event: "Introduction to Summer Internship-2023"

Date of Seminar: 24/04/2023

Summer Internship is one of the important subject for electrical engineering students. To aware about it, Government Engineering College, Modasa, Electrical Engineering Department has organized an event of seminar for 6th-semester students, and the date of the event was 25/04/2023. and the duration of the talk was from 01.00 P.M. to 2.00 P.M. There were 50 participants. The topic was "Introduction to Summer Internship-2023". The key Speaker were Prof. Darshan U. Thakar, Prof. V.J. Upadhyay and Prof. H.S. Pandya. At the end of the session, the doubts regarding to topic were cleared. The whole session was very interactive and students got lots of knowledge by attending the lecture.









Name of Event: "Pre Placement Talk-2023"

Date of Seminar: 24/04/2023

To aware about placement related activities, Government Engineering College, Modasa, Electrical Engineering Department has organized an event of seminar for 6th-semester students, and the date of the event was 25/04/2023. and the duration of the talk was from 02.00 P.M. to 3.00 P.M. There were 50 participants. The topic was "Pre Placement Talk-2023". The key Speaker were Prof. Darshan U. Thakar, Prof. V.J. Upadhyay and Prof. H.S. Pandya. At the end of the session, the doubts regarding to topic were cleared. The whole session was very interactive and students got lots of knowledge by attending the lecture.









G20

2008

ACTIVITIES

2008

Name of Activity:- "Introduction to Computer Aided Engineering Drafting

Date of Activity:- **24.02.2023**

Timing of Activity:- **1.20pm onward**

Venue of Activity:- **Electrical Engineering Department seminar hall**

Name of Coordinators:- **Dr. H. S. Pandya,**

Name of Experts:- **Dr. H. S. Pandya**

Number of Participants:- **15 students**

Objective of Activity/Event:

Introducing students to AutoCAD with hands-on Skill of Computer Aided drafting to enhance employability

Details of Activities:-

The session started with discussion regarding significance of Engineering Drafting, followed by introduction to the Computer Aided Drafting, its demand from the industries. Students were guided how to install AutoCAD in mobile as well as windows.

The session then converted to a practical session wherein, participants were exposed to the AutoCAD app. They were introduced how to write commands using absolute/relative Cartesian and polar systems in Auto cad using keyboard/keypad, mouse on stylus.

The participants were guided to apply above information to create several drawings of electrical machine parts to practice with.

The session was totally interactive, collaborative and interesting for both students and faculty.

Photographs of Activities:-





Name of Activity:- **Enhancement of knowledge regarding the renewable energy.**

Date of Activity:- **24.02.2023**

Timing of Activity:- **11.15 AM onward**

Venue of Activity:- **Electrical Department**

Name of Coordinators:- **S V Banker, C K Bariya, T A Chaudhari**

Name of Experts:- **Prof. Pratik Mochi**

Number of Participants:- **56**

Objective of Activity/Event: **Skill development to Enhance Employability & knowledge of the students.**

Details of the Activity :- **In this program students were informed about the current scenario of the renewable energies generation and the application. Different types of solar PV modules were discussed. Students were informed about the generation and the consumption of solar energy wrt the other renewable energy and also wrt the other traditional energy sources. The industries may demand the students, having some skill & knowledge about the same. This kind of technical expert lecture can increase the skill and the capability of the students to perform good in industries as well as for the startups.**

Photos regarding the Event :-





Name of Activity:- Innovation Quest

Date of Activity:-08/02/23

Timing of Activity:-12:00 noon

Venue of Activity:- Vishveshvariya Hall

Name of Coordinators:- Dr.H.S.Pandya

Name of Experts:- Dr.V.J.Upadhyay, Dr. S.S.Singh

Number of Participants:-17

Objective of Activity/Event: "Innovation Quest" Electrical Engineering Department organized drive to invite innovative ideas from the students for the "proof of Concept" under Institute SSIP CELL.

Details of Activities:-

The event was organized for promoting innovation quest within students wherein, students were addressed regarding the SSIP CELL, Importance of design thinking and presentation of the applicants were organized where in two teams were shortlisted for the "proof of concept" to be sponsored by SSIP2.0 fund under SSIP CELL GECM.

Photographs of Activities:-



Name of Activity:- Skill Development Program for Enhancement of Employability

Date of Activity:- 13.02.2023

Timing of Activity:- 1 PM onward

Venue of Activity:- Electrical Department

Name of Coordinators:- Dr.H.S.Pandya,

Name of Experts:- Dr U L Makwana

Number of Participants:- 28

Objective of Activity/Event: Skill development to Enhance Employability of the students

Details of Activities:- In this program students were aware about Skill. The industries will demand students with some skill in programming language. This software skill will enhance the student's ability to get job in campus and off campus placements.

Photographs of Activities:-



Name of Activity:- Health awareness session in collaboration with Red cross Society

Date of Activity:- **21.02.2023**

Timing of Activity:- **11 AM onward**

Venue of Activity:- **Electrical Engineering Department seminar hall**

Name of Coordinators:- **Prof.(Dr.) U.L.Makwana ,Dr. H. S. Pandya,**

Name of Experts:- **Shri Baratbhai Parmar, President, Red cross Soc., Modasa,
Shri Nareshbhai Ghoel, President, Youth Redcross soc.
Shri Dhavalbhai Shah, President, Ahmedabad Redcross soc.**

Number of Participants:- **29 students 10 Faculty Members**

Objective of Activity/Event:

Spreading awareness regarding health issues and remedial activities.

Details of Activities:-

The event was organized with a view to spread awaness of general healthy life, common health issues, history and role of Red Cross soc. Significance of becoming student members of Red Cross soc. Maj.(Dr.)Sanghvi sir, Prof.(Dr.)V.J.Upadhyay Sir have address and motivated students upon above subject. Prof.(Dr.) U.L.Makwana sir has motivated students to participate and become life member of RedCross soc.

Photographs of Activities:-





Date of Activity:- 21.02.2023
Timing of Activity:- 11 AM onward
Venue of Activity:- Electrical Engineering Department seminar hall
Name of Coordinators:- Prof.(Dr.) U.L.Makwana ,Dr. H. S. Pandya,
Name of Experts:- Shri Baratbhai Parmar, President, Red cross Soc., Modasa,
Shri Nareshbhai Ghoel, President, Youth Redcross soc.
Shri Dhavalbhai Shah, President, Ahmedabad Redcross soc.
Number of Participants:- 29 students 10 Faculty Members
Objective of Activity/Event:
Spreading awareness regarding health issues and remedial activities.

Details of Activities:-
The event was organized with a view to spread awaness of general healthy life, common health issues, history and role of Red Cross soc. Significance of becoming student members of Red Cross soc. Maj.(Dr.)Sanghvi sir, Prof.(Dr.)V.J.Upadhyay Sir have address and motivated

students upon above subject. Prof.(Dr.) U.L.Makwana sir has motivated students to participate and become life member of RedCross soc.

Photographs of Activities:-



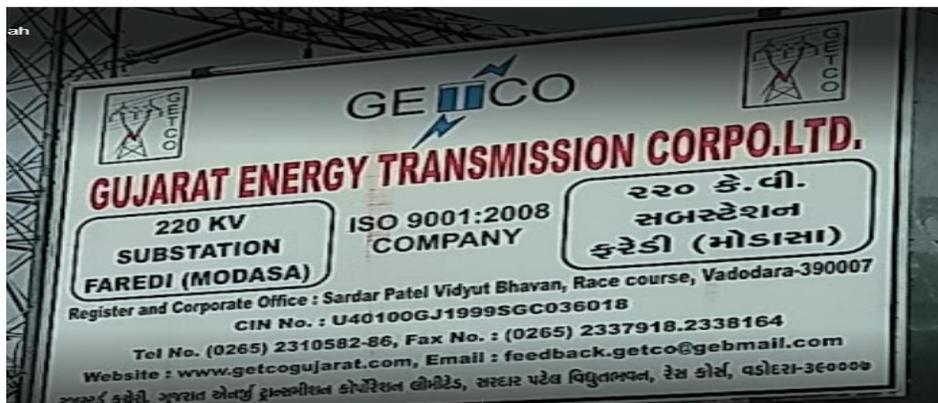
INDUSTRIAL

VISITS

Name of Industry: Faredi Substation

Date of Visit: 02/09/2022

Government Engineering College, Modasa, Electrical Engineering Department has organized an industrial visit to Faredi Substation, Modasa Gujarat. 65 students along with 3 faculties member visited the industry on above mentioned date.





GENERAL INFORMATION: Gujarat Energy Transmission Corporation Limited (GETCO) was set up in May 1999 and is registered under the Companies Act, 1956. The Company was promoted by erstwhile Gujarat Electricity Board (GEB) as its wholly owned subsidiary in the context of liberalization and as a part of efforts towards restructuring of the Power Sector. The company is now a subsidiary of Gujarat Urja Vikas Nigam, the successor company to the GEB. An electrical substation is a subsidiary station of an electricity generation, transmission and distribution system where voltage is transformed from high to low or the reverse using transformers. Electric power may flow through several substations between generating plant and consumer, and may be changed in voltage in several steps. A substation that has a step-up transformer increases the voltage while decreasing the current, while a step-down transformer decreases the voltage while increasing the current for domestic and commercial distribution.

OBJECTIVE OF VISIT: Our main purpose for this visit is to be familiar with industrial environment and to get practical knowledge of electrical power transmission and distribution. Being final year students we will get to know about basic industrial functioning of power transmission and distribution. Students will also get familiar with Transformer maintenance, circuit breaker, Transformer isolator, bus bar, Protective relays, Lightning arresters, Load break switches, SCADA system, Current and voltage Transformer and Battery room.

EQUIPMENT IN A 220KV SUB-STATION

The equipment required for a transformer Sub-Station depends upon the type of Sub-Station, Service requirement and the degree of protection desired.

220KV EHV Sub-Station has the following major equipments:

- Bus-bar
- Insulators
- Isolating Switches
- Circuit breaker
- Protective relay
- Instrument Transformer

CONCLUSION

Now from this report we can conclude that electricity plays an important role in our life. We are made aware of how the transmission the transmission of electricity is done. We too came to know about the various parts of the substation system. The three wings of electrical system viz. generation, transmission and distribution are connected to each other and that too very perfectly.

Thus, for effective transmission and distribution a substation must:

- Ensure steady state and transient stability
- Effective voltage control
- Prevention of loss of synchronism
- Reliable supply by feeding the network at various points
- Fault analysis improvement in respective field
- Establishment of economic load distribution

Name of Industry: L&T Electrical & Automation (E&A)

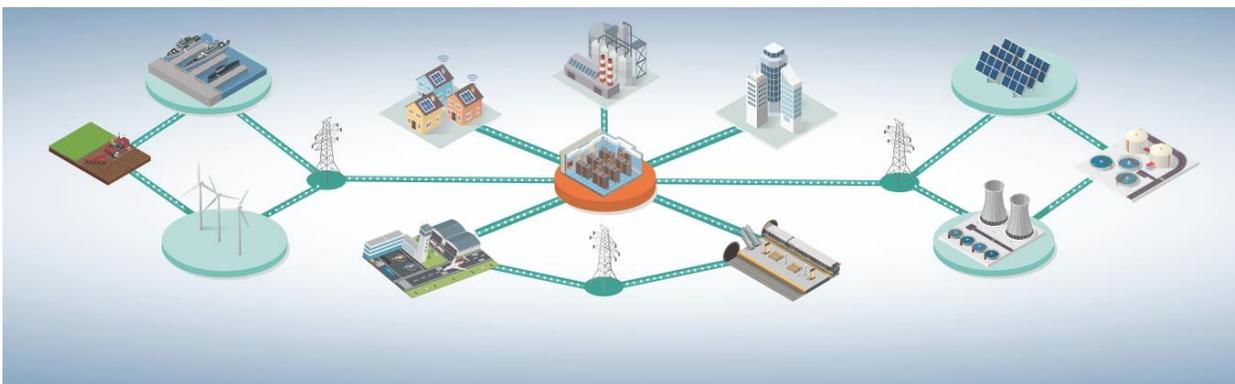
Date of Visit: 12/11/2022

Government Engineering College, Modasa, Electrical Engineering Department has organized an industrial visit L&T Electrical & Automation (E&A),Vadodara Gujarat. 21 students along with 2 faculties member visited the industry on above mentioned date.





GENERAL INFORMATION:



The business basket of L&T Electrical & Automation (E&A) contains low and medium voltage switchgear products, electrical systems, energy meters and automation solutions. Its products and solutions cater to industry, utility, building & home, infrastructure and agriculture segments.

The E&A business comprises two Strategic Business Groups (SBGs) – Products SBG and Projects SBG and offers a wide range of low and medium voltage switchgear, electrical systems, marine switchgear, industrial and building automation solutions, energy management systems and metering solutions. Its products and solutions cater to a variety of segments like industries, utilities, infrastructure, building and agriculture.

We manufacture custom-built switchboards with conventional as well as intelligent protection, control and communication to meet the power distribution and motor control needs of industries.

We also manufacture and market a comprehensive range of high quality electronic energy meters and numerical protective relays for utilities, industries, commercial establishments and individual users.

L&T Electrical and Automation business offers products and systems solutions for control, regulation and monitoring - planning, designing, engineering and implementing drive controls, automation and UPS related projects from concept to commissioning. Our systems solutions cover a host of industry verticals like cement, metals, paper, oil & gas, water, power, food processing, etc.



A major strength of L&T Electrical and Automation is its in-house design and development center for switchgear as well as tooling facility that designs and manufactures a wide range of high precision tools, a per-requisite for high quality products. The facility is equipped with CAD systems, and is also linked to the integrated CAD facility.

Additionally, our six [Switchgear Training Centres \(STCs\)](#) at Pune, Lucknow, Coonoor, Vadodara, Delhi and Kolkata promote good electrical practices in the industry by conducting courses.

The manufacturing operations of our businesses are located at Navi Mumbai (Mahape & Rabale), Ahmednagar, Vadodara, Coimbatore and Mysore in India as well as in Saudi Arabia, UAE (Jabel Ali, Dubai), Malaysia, Indonesia.

L&T Electrical & Automation is a business unit of Schneider Electric India Pvt. Ltd

OBJECTIVE OF VISIT: Our main purpose for this visit is to be familiar with industrial environment and to get practical knowledge of electrical Automation. Being final year students we will get to know about basic industrial functioning of Automation. Students will also get familiar with Transformer maintenance, circuit

breaker, Transformer isolator, bus bar, Protective relays, Lightning arresters, Load break switches, SCADA system, Current and voltage Transformer and Battery room.



A capacity expansion initiative, the Vadodara manufacturing facility was inaugurated in July 2012 on an 18-acre plot adjacent to L&T Knowledge City.

The 27,000 sq meter 'Green' facility houses modules for assembly lines for Air Circuit Breakers (ACBs) and Moulded Case Circuit Breakers (MCCBs), shops for press working, moulding and tooling. All critical-to-quality steps have error-free assembly and the lines are equipped to produce circuit breakers of different frames and several ratings from 16A to 6300A.

Environment management measures include tree plantation, rain water harvesting, zero discharge of water, optimal utilization of energy like sun light and wet FDVS system.

Name of Industry: 66 kV Modasa Substation

Date of Visit: 05/04/2023

Government Engineering College, Modasa, Electrical Engineering Department has organized an industrial visit to 66 kV substation, Modasa Gujarat. 65 students along with 3 faculties member visited the industry on above mentioned date.







GENERAL INFORMATION: Gujarat Energy Transmission Corporation Limited (GETCO) was set up in May 1999 and is registered under the Companies Act, 1956. The Company was promoted by erstwhile Gujarat Electricity Board (GEB) as its wholly owned subsidiary in the context of liberalization and as a part of efforts towards restructuring of the Power Sector. The company is now a subsidiary of Gujarat Urja Vikas Nigam, the successor company to the GEB. An electrical substation is a subsidiary station of an electricity generation, transmission and distribution system where voltage is transformed from high to low or the reverse using transformers. Electric power may flow through several substations between generating plant and consumer, and may be changed in voltage in several steps. A substation that has a step-up transformer increases the voltage while decreasing the current, while a step-down transformer decreases the voltage while increasing the current for domestic and commercial distribution.

OBJECTIVE OF VISIT: Our main purpose for this visit is to be familiar with industrial environment and to get practical knowledge of electrical power transmission and distribution. Being final year students we will get to know about basic industrial functioning of power transmission and distribution. Students will also get familiar with Transformer maintenance, circuit breaker, Transformer isolator, bus bar, Protective relays, Lightning arresters, Load break switches, SCADA system, Current and voltage Transformer and Battery room.

EQUIPMENT IN A 66 KV SUB-STATION

The equipment required for a transformer Sub-Station depends upon the type of Sub-Station, Service requirement and the degree of protection desired.

66 KV EHV Sub-Station has the following major equipments:

- Bus-bar
- Insulators
- Isolating Switches
- Circuit breaker
- Protective relay
- Instrument Transformer

CONCLUSION

Now from this report we can conclude that electricity plays an important role in our life. We are made aware of how the transmission the transmission of electricity is done. We too came to know about the various parts of the substation system. The three wings of electrical system viz. generation, transmission and distribution are connected to each other and that too very perfectly.

Thus, for effective transmission and distribution a substation must:

- Ensure steady state and transient stability
- Effective voltage control
- Prevention of loss of synchronism
- Reliable supply by feeding the network at various points
- Fault analysis improvement in respective field
- Establishment of economic load distribution

ALUMNI MEET

2023

ALUMNI MEET- 23 (March 04, 2023, Saturday)

The Institute ensures a lifelong connection with the community of its alumni. It constituted the **ENCOMAA (Engineering College Modasa Alumni Association)** to foster continuous engagement of the alumni with their alma mater. Government Engineering College, Modasa is proud of its alumni. The institute is having alumni across the world. The Institute constituted “**ENCOMAA (Engineering College Modasa Alumni Association)**” in year 2004 with the objective to foster continuous engagement of the alumni with the institute.

There are many reasons why alumni relations can be crucial to the institute's capacity building and expansion. Alumni frequently have opportunities to utilize the institution's expertise in their professional lives. In order to entice former students to return to their alma mater, institutions need to cultivate positive relationships with them. In order to strengthen this two-way relationship, institutes should meet with alumni on a regular basis.



Government Engineering College, Modasa organized an **ALUMNI MEET-23** on 04, March, 2023, Saturday to meet all alumni of the institute. This meet was arranged at the campus of Government Engineering College, Modasa.

More than 800 alumni have joined the alumni network, which is expanding, and the institute has already begun the process for lifetime membership in the alumni association (ENCOMAA). To attend this event, all alumni and their families were invited. Over 300 former students consented to attend this meet. This event was open to all former principals and faculty members of the institute. The number of alumni who wanted to attend this event was huge, especially the older ones.

Breakfast and registration for the meet took place in the institute's main building at 10:00 a.m. All the alumni who attended the meet received a token of memory and a registration kit. 350 alumni joined at meet, many of whom were present with family and more than 60 alumni spot registered on the same day. Alumni were delighted to meet their former colleagues and friends. At the selfie zone, former students took selfies with their classmates and professors. This event was attended by more than 20 former faculty members and former principals.



The gathering session was arranged at the LRC (Learning Resource Center). The session was started with lamp lighting and floral welcome of all dignitaries of the dias. The alumni were welcomed by Dr. B. J. Shah, Principal, Government Engineering College, Modasa. Mr. Jaydattsinh Puwar, President, ENCOMAA addressed all alumni and encouraged them to join the alumni network and make it strengthen for the development of the institute. Dr. M. N. Patel, Former Principal of the Institute addressed the alumni and shared his experience at the institute and also gave some suggestions for growing alumni network. Mr. J. S. Prajapati, Former Faculty member and General Manager, GSRTC, Gujarat addressed the audience.



Dr. U. V. Shah, Professor Mechanical Engineering and Vice-President of ENCOMAA presented the presentation of the institute and shared the aspirations of the institute.

After the presentation, alumni shared their experiences. The majority of alumni are employed in prestigious Indian and international industries and organizations. The majority of alumni who graduated in engineering before the year 2000 attended this meet and are well-positioned in their fields.

They encouraged other alumnis to join the alumni network and support the institute for the future aspirations of the institute. ENCOMAA received donation from their distinguish alumnis Dr. (Prof.) S. D. Panchal (Presently Professor at GTU) Rs. 40000 and Rs. 100000 from Mr. Nikunj Patel (CEO Australian Premium Solar – APS).

The session was finished with statement of gratitude reached out by Prof. Anil Prajapati, ENCOMAA's Faculty Coordinator. The QR code allowed attendees to upload their photos and provide feedback.

The lunch was set up in New Hostel, Block-E. Following the lunch, the alumni's respective departments planned some activities. Alumni recalled their experiences at the institute while they visited the department, campus and their hostel.



Their department scheduled an alumni interaction in which alumni discussed their industry experiences. A productive discussion was held regarding ways to expand the institute and improve student placement.

Alumni had in-depth discussions about a variety of topics, including the teaching-learning process, skill set requirements, career opportunities, placement, and mentoring. Alumni ensured to support in all aspects to the institute for the development, placement and mentorship of the students.



The meet was effectively finished at 5.30pm. Alumni said to organize such event every year. Additionally, the event was greatly appreciated by the state's media.

STUDENT

SECTION

Student Achievement

1.Thakor Harsh has participated in Azadi ka Amrut Mahotsav.



Student Achievement:- 2022-23

Sr.No.	Semester	Name/s	Type of Achievement
1	8	Chaitanya prakash choudhary	Placed in campus recruitment-Torrent Power with a package of 3.5 L
2	8	PATEL SNEH BALDEVBHAI	Placed in campus recruitment-Alpha Tech Automation with a package of 1.5 L
3	8	SMIT PRANAMI	Placed in campus recruitment-Alpha Tech Automation with a package of 1.5 L
4	8	PANCHAL MILANKUMAR HARSHADBHAI	Placed in campus recruitment-Alpha Tech Automation with a package of 1.5 L
5	8	MODI MEET ROHITKUMAR	Placed in campus recruitment-Alpha Tech Automation with a package of 1.5 L
6	5th	Bhatt Shabbirhasan Abbas Ali	Teams Selected to Participate in Azadi ka Amrut Mahotsav Hackathon title:Universal Smart Electric Vehicle (EV) charging infrastructure Mentor:Prof.Darshan Thakar
7	5th	Manjurahamad Agalodiya	
8	5th	PARMAR VIPULSINH	
9	5th	Patel Vishal Rajeshbhai	
10	5th	Makwana Mahaveersinh	
11	Alumnai	Malek Mohammadsahil	Teams Selected to Participate in Azadi ka Amrut Mahotsav Hackathon ,Title:Smart street light solutions Mentor:Prof. N.V.Upadhyay
12	Alumnai	Joshi Satyam	
13	Alumnai	Nagda Ahemdraza	
14	Alumnai	Shaikh Arbaj	
15	3	Harsh Thakor	Teams Selected to Participate in Azadi ka Amrut Mahotsav Hackathon ,Title:Clean solar panel with less water Mentor:Prof. V.J.Upadhyay
16	3	Vraj Patel	
17	3	SHAIKH MOHAMMADAZAZ MOHAMMED HASANABBAS	
18	3	Isha gandhi	
19	7th	Thakar Dhruv Jitendrabhai	Teams Selected to Participate in Azadi ka Amrut Mahotsav Hackathon,Title: Universal Smart Electric Vehicle (EV) charging infrastructure -Mentor:Dr.H.S.Pandya
20	7th	Parekh Manav Bipinbhai	
21	7th	Thakar Jay Bhaskarbhai	
22	7th	Sharma Harsh	
23	7th	Tank Divyesh Kiritbhai	
24	7th	Patel Satyajit kumar Maheshbhai	
25	7th	Vadi Survirsinh	
26	5th	Chaudhary Ansh Mehulkumar	Teams Selected to Participate in Azadi ka Amrut Mahotsav Hackathon ,Title:Mechanism to prevent road accident between two vehicles. Mentor:Prof.K.K.Bhatt
27	5th	Baria Nandkishor Narvatsinh	
28	5th	Zala scahin Bharatbhai	
29	5th	Sindhiya Kumari bhuvneshwari shailesh bhai	
30	7th	Vihol Dhruvrajsinh Chetansinh	Teams Selected to Participate in Azadi ka Amrut Mahotsav Hackathon ,Title:Smart helmet to lead the rider Mentor:Prof. N.V.Upadhyay
31	7th	Sathavara Arpit Jitendrakumar	
32	7th	Patel Yogen	
33	7th	Jadhav Pratik Shivdas	
34	7th	Patel Chintan	

35	7th	babariya miren	Teams Selected to Participate in Azadi ka Amrut Mahotsav Hackathon ,Title:Universal Smart Electric Vehicle (EV) charging infrastructure - Mentor:Dr.H.S.Pandya
36	7th	Parekh Manav Bipinbhai	
37	7th	Thakar Jay Bhaskarbhai	
38	5th	Baria Nandkishor Narvatsinh	
39	5th	Zala scahin Bharatbhai	
40	5th	Sindhiya Kumari bhuvneshwari shailesh bhai	

Jay Dhimmer is certified by empi-b-school for attending the expert lecture on fundamental knowledge of E-Commerce.



Fulbaria Mohit is awardee by GTU for performing good in academic.



*Electricity is really just
organized lightning.*

**- A Team Electrozone,
Electrical Engineering
Department
G.E.C - Modasa**