

GOVERNMENT ENGINEERING COLLEGE, MODASA

Newsletter

January – June 2023

Vol. 3 – Issue 1



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GECM E-NEWS

COLLEGE SAGA

Placement Fair 2023

A placement fair of entire Aravalli district was hosted at Government Engineering College, Modasa on 13/03/2023. Total 11 institutes (Government and Grant in Aid) have participated in this fair. 16 companies and 317 students have been the part of this fair. The fair was conducted in blended mode. Few companies were invited in college campus, whereas few industries conducted interviews in online modes such as google meet, MS Team, Zoom meet etc. 90 students have been placed in these 16 companies.



Alumni Meet 2023

More than 800 alumni joined the alumni network, which keeps expanding, and already many have enrolled for lifetime membership in the alumni association (ENCOMAA). To attend this event, all alumni and their families were invited. The number of alumni who were eager to attend the event of Alumni Meet 2023 was huge in number but all could not make it. Alumni Meet-2023 was successfully organized on

4th March, Saturday to have a get together for all the alumni. This meet was arranged at the campus in the new seminar hall where it was jam-packed with alumni, students and faculties. This event was also open to all former principals and faculty members of the institute from 1984.

Breakfast and registration for the meet was held at the main building 10:00 a.m. onwards. All the alumni who attended the meet received a token of memory and a registration kit. The number of alumni who joined meet was more than 350, many of whom were present with family and more than 60 alumni spot registered. Alumni were delighted to meet their former colleagues and friends. They enthusiastically clicked selfies with their classmates and professors at the selfie zone. At the event, after the address from the principal and alumni president, past students became emotional when they shared their journey to success and narrated the role of their college days in their achievements.



Activities under G20

About 23 activities were conducted at GECM under G20 and Y20.

1. Expert Talk on Effect of Disaster on Urban Development

In this talk, various types of disasters were discussed with their impact on human being by Capt. Dr. C. S. Sanghvi. The program was held on 08/02/2023 on natural disasters that affect our living spaces adversely due to the increasing urban population, the decrease in ecosystem services such as erosion and flood control, irregular and poor-quality construction, global climate change, and insufficient budgets for urban renewal. Disasters can significantly impede the effectiveness of development and resource allocation. The damage is observed in many areas and the impacts can be as complex as the economy itself. The root causes of disasters observed worldwide are obvious and the mitigation measures of disasters were highlighted. Overall, the event was interesting with very good interaction from both sides.



2. Awareness program on Y20

The above program was held on 10/02/2023 to create awareness among students about Y20 by Dr. C. S. Sanghvi and Dr. B. C. Khatri, Nodal Officer. Presentation was given on Y20 activities which is

aimed at enabling young people to express their visions and ideas to the heads of state and government of the G20. It is an inclusive discussion platform, from which a series of agreed recommendations related to the G20 agenda are compiled into a joint communique.



3. Expert Talk on Spoken Tutorial for Skill Development of Engineers by IIT, Mumbai

It was launched by IIT, Mumbai on 14/02/2023 to create significance of spoken tutorial. It was coordinated by Dr. N. G. Raval at institute level. The application area of all listed software on IIT, Mumbai web site were discussed. The procedure for registration and examination was explained in detail. At present one software – (SciLab) is selected for the purpose of learning. Overall, the event was successful with very good participation.



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4. Health awareness session in collaboration with Red cross Society

The event was conducted on 21/02/2023 with a view to spread awareness of healthy life, common health issues, history and role of Red Cross society. Significance of student membership of Red Cross society was explained by Capt. Dr. C. S. Sanghvi, Prof. V. J. Upadhyay addressed and motivated students to become members. Prof. U. L. Makwana and Prof. H. S. Pandya coordinated the event and pursued students to become life member of RedCross society.



5. Expert Talk on Career Opportunities in Civil Engineering

On 21/2/2023, an expert talk on career opportunities in civil engineering was organized at QEEE hall main building by civil engineering and applied mechanics department. The keynote speaker for the event was Prof. G. P. Vadodaria, principal GEC Bhavnagar having 30 years of experience in the field of civil engineering. The talk was contributing and thought provoking for students as importance of this profession in present scenario was highlighted. He emphasized the role of civil engineers in designing, constructing, and maintaining the built environment, including roads, bridges, buildings, and infrastructure systems. The talk was enlightening for students and faculties.



6. Expert Talk on “Jivan Jivavani Kala”

A motivational speech by Shri Sureshdan Gadhvi was organized on 21/2/2023 at QEEE hall in main building by civil engineering and applied mechanics department. The keynote speaker for the event is a well-known motivational speaker and life coach. Shri Gadhvi began the talk by providing an insight into importance of living life to the fullest and achieving one's goals and dreams. He spoke about the various challenges and obstacles that people face in their daily lives and how to overcome them through perseverance, determination, and positive thinking. His wit and humor cheered the crowd and inspired the students and faculties equally.



7. Industry 4.0 and Startup

This seminar was organized on 23/02/2023 under G20 & Y20. Mr. Nishad Joshi, an expert in additive manufacturing from university of central Lancashire, England had delivered an interesting and informative session for the students of mechanical and automobile engineering. The program was coordinated by Prof. P. M. Mistri and Prof. H. I. Chaudhari. More than 100 students actively participated in this session.



8. Expert talk on renewable energy

In this program conducted on 24/02/2023, students were informed about the current scenario of the renewable energy generation and their application. Different types of solar PV modules, the generation and the consumption of solar energy with respect to the other renewable energy and also with respect to the other traditional energy sources was discussed. This technical expert lecture contributes in developing skill and capability of students to perform well in industries as well as for the startups.



9. Expert talk on cable and wire testing skills

This program was held on 24/02/2023, in which students were informed about the cable & wire testing scenario in context of the existing facilities and the available devices for the testing. Various types of test being performed to ensure the quality of the cable & wire were discussed. The cable 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.

10. Bridging communities for holistic partnership-based household enterprises

This seminar was organized on 28/02/2023 under G20 & Y20. Dr. Rajkumar Satankar, department of mechanical engineering Poornima College of Engineering, Jaipur, Rajasthan, had delivered the session. The session was really knowledgeable and informative about Entrepreneurship and Startup. The program was coordinated by Prof. P. M. Mistri and Prof. H. I. Chaudhari. More than 130 students have actively participated in the program.

COLLEGE SAGA



11. Science Carnival 2023 Visit

Students visited science city, Ahmedabad on 01/03/2023 for Science Carnival 2023 which is truly a grand festival of science. It is truly commendable that students participated in this interesting program that contributes in inculcating interest in science in the next generation of the state and providing a suitable platform to science lovers through the approach of fun with knowledge. Science Carnival-2023 would promote the spirit of inquiry among the students through visit of various gallery at science city ranging from Robotics, Space science and Aquarium etc.

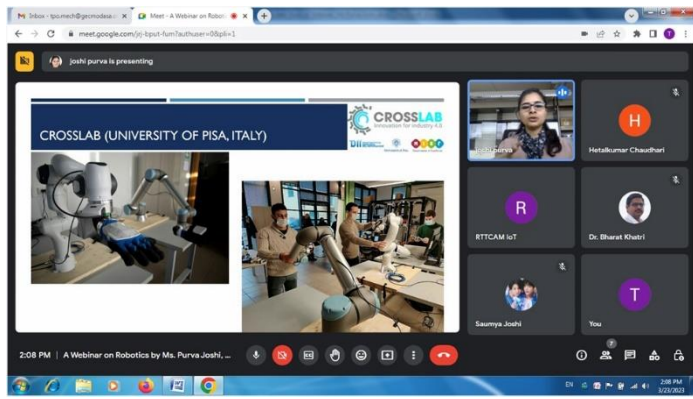


12. Google Seminar

Gujarat government collaborated on 01/03/2023 with renowned company Google to equip the next generation with cutting edge technology. State Government's Science Technology Department and Google plan to train about 10,000 persons regarding Internet safety. To make the most of the Internet, students were informed to be prepared to make smart decisions. Be Internet Awesome teaches kids the fundamentals of digital citizenship and safety so they can explore the online world with confidence.

13. Webinar on Robotics

This seminar was organized on 23/03/2023 under G20 & Y20. Ms. Purva Joshi, Scientific Researcher in Communication, Automation and computer science, in University of Pisa, Italy had delivered the session. The session Provide valuable insights about Industry 4.0 and advances in robotics. The program was coordinated by Prof. P. M. Mistri and Prof. H. I. Chaudhari. More than 65 students have actively participated in the program.



14. Awareness on acts related to women's safety

The seminar was attended by around 140 participants on 27/03/2023. Seminar was started with the remembrance of almighty God. Prof. Shilpa Rana (Coordinator -WDC GECEM) welcomed everyone with a welcome speech. Principal Dr. B. J. Shah addressed the gathering and threw some light on the importance

COLLEGE SAGA

of women empowerment and her sacrifices for her family and Society. He explained the need of such seminars with quote “Nari Shakti”. The speakers enlightened the girls students on safety aspects.



15. Debate Competition

The debate competition was organized in CE/IT department on 28/03/2023 at 2:30 PM in Room No : 8119. Firstly, the participants were asked to form two teams among them. The topic of the debate was “Digital economy” so one team raised their points in favor of digital economy and another team against of it. The debate was one hour long, all the participants put their efforts to defend their topic. With conclusion and some memorable photographs, the event ended with great insight.



16. Drawing Competition

The drawing competition under G20 event was held on 28/03/2023 at 12:00 PM. In this competition total participate were total 25. After collecting the drawing

sheet from the participants Prof. Rahul Vaza did evaluation and announce winners.



17. Elocution Competition

The events was conducted at civil department at 12:00 PM on 28/03/2023. All the contestants present during the event presented their speech before the students and faculty coordinator. All the contestant successfully participated in the event under the coordination of Prof. Deven Bhayani. At the end of the event, photographs were clicked with the all participants as well as with the faculty coordinator.



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18. Essay Writing

At 11:30 AM on 28/03/2023 we start the an essay writing competition on anti-corruption under G20 event was conducted at civil department under coordination of Prof. Girish Limbad. Coordinator gave information about rules and details of essay writing and at 12:30 PM this event ended.



20. Poster Design

The event started at 2:30 pm on 28/03/2023 in the civil department in room no. 1204 . The participants were instructed by the coordinators and the participants made their posters on G20 theme.



19. Handicraft Competition

A handicraft competition was arranged on 28/03/2023 at CE/IT Department Room no. 8213. All department students have participated in this competition and winners were awarded by certificate.

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21. Quiz competition

The event was conducted at the CE/IT department on 2:30 PM on 28/03/2023. All contestants were present in the event. There are three rounds in quiz competition. Round 1 was common round for all participation, next round 2 for 16 participation that was sort listed in round 1 and then round 3 has a three round first round. After all this round judge has decided the winner. At the end of the event, clicked photos with all participants as well as with the faculty coordinators.

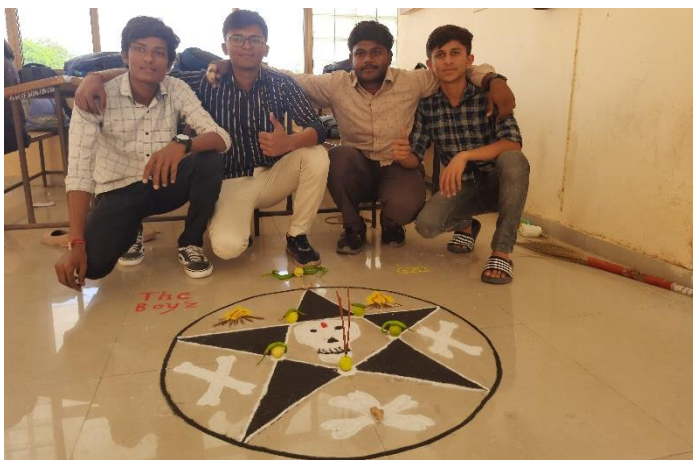


23. Empowering Entrepreneurs: Exploring the Vibrant Startup Ecosystem of India

The event was organized for promoting innovation quest within students wherein, students were addressed regarding the SSIP CELL, Importance of design thinking by Shri Harsh Gandhi, on how and why to startup, what are the processes, under G20 CELL and SSIP CELL GEC Modasa on 10/05/2023.

22. Rangoli Activity

The Event was conducted at CE/IT Department on 12:00 pm on 28/03/2023. All Contestant have participated successfully under the co-ordination of Prof. Rahul N. Vaza. The event concluded on 2:00 pm after then some photographs with all participants clicked.



DEPARTMENT SPOTLIGHT

Applied Mechanics & Civil Engineering Department

Informative talk for elective subject and Internship

Informative talk was arranged on 21/1/2023 to discuss about different elective subject offered by Civil Engineering and Applied Mechanics department in Semester 6th. Prof. A. J. Patel, Prof. N. G. Raval. and Prof. U. K. Khare gave brief idea about elective subjects.



Expert talk on fundamentals of urban planning and development

During expert talk, the concept of cyclic process of urban planning, fields of urban planning, regional planning, environmental planning, transport planning and infrastructure planning are discussed with examples by the expert Prof. N. G. Raval on 08/02/2023. The basic attributes of urban planning, their interrelationship, and importance were discussed. All types of sequential transportation modeling including four steps of planning were

explained in depth. Overall, the event was successful with very good interaction from both sides.



Hybrid (online and offline) program on developing institute level DRMP

Visit of Gujarat Institute of Disaster Management (GIDM) and Institute of Seismological Research (ISR) was conducted under G20 on 20/02/2023. Offline training was given by Shri Piyush Ramteke, director general of GIDM wherein along with his team gave knowledge about disaster survey and clear definition about disaster, hazards and vulnerability. They explained the terminologies of DRM, conceptual framework for disaster risk reduction and clearly explained that disasters are not natural and need more intervention and planning. After the lunch break in group activities they divided the participants in 4 groups and developed a draft DRMP for GEC, Modasa. After that a visit was conducted to Institute of Seismological Research (ISR). This was helpful to students for strengthening education and research, specifically in earthquake risk management.

DEPARTMENT SPOTLIGHT



Site visit to civil hospital, Modasa

Civil engineering students of semester 6 visited the construction site on 17/04/2023. The students were led by Prof. Ankit Patel, and were given a tour of the site by Mr. Kanubhai Jadav (executive deputy engineer). They observed the different phases of construction, including foundation work to the superstructure. This site visit was a valuable learning experience as they were able to see firsthand the different aspects of civil engineering that go into the construction of a hospital. They also learned about the challenges of managing a large construction project and the importance of teamwork. The students were excited to apply what they learned on the site to their own future projects. They are confident that this knowledge they gained will help them to become successful civil engineers.



Electronics & Communication Department

Workshop on industrial automation and embedded system

The expert lecture conducted on 14/03/2023 covered an introductory overview of embedded systems, highlighting their relevance in today's technology landscape. The audience gained insights into key embedded system concepts, followed by a practical demonstration of 8051 microcontroller interfacing for real-world applications. Shifting focus to industrial automation, the lecture detailed the significance of programmable logic controllers (PLCs) in streamlining industrial processes. The role of PLCs in enhancing efficiency and reducing manual intervention was explained, along with discussions on their architecture, programming, and versatile applications across industries. Overall, the lecture provided a well-rounded understanding of embedded systems, spanning from microcontroller interfacing to the broader scope of industrial automation through PLCs. Students gained fundamental knowledge that prepare them to explore these technologies in their future professional pursuits.



DEPARTMENT SPOTLIGHT

Electrical Engineering Department

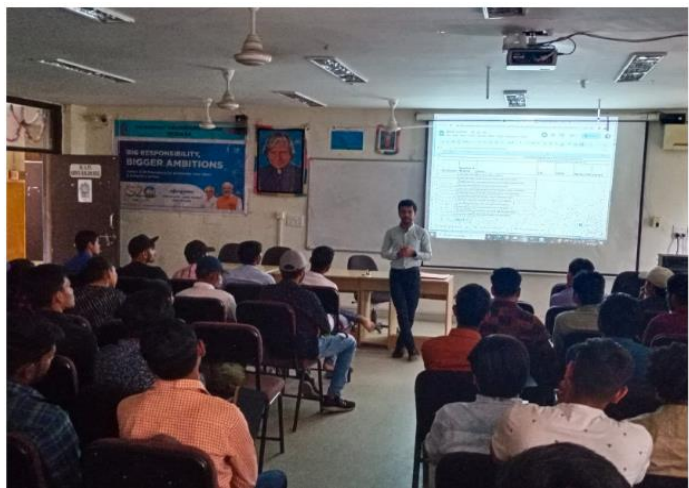
Visit to 66 kV Modasa Substation

An industrial visit to 66 kV substation, Modasa was organized on 05/04/2023. Total 65 students along with Prof. V. J. Upadhyay and Prof. U. L. Makwana visited the industry.



Seminar on summer internship

This event for 6th semester students, was organized on 25/04/2023. An interactive session was conducted by Prof. V. J. Upadhyay, Prof. Darshan U. Thakar, and Prof. H. S. Pandya. There were 50 participants present in this seminar. At the end of the session, the doubts regarding internship were cleared.



Pre placement talk

This seminar for 6th semester students, was organized on 25/04/2023. An informative session was conducted by Prof. V. J. Upadhyay, Prof. Darshan U. Thakar, and Prof. H. S. Pandya. There were 50 participants present. At the end of the session, the doubts regarding placement were cleared.



Innovation Quest under SSIP and G20

An intense drive to invite innovative ideas from the students under Institute SSIP cell and G20 on 08/02/2023 by Prof. V. J. Upadhyay, Prof. S. S. Singh, Prof. H. S. Pandya for 17 participants at Vishveshvariya Hall.

DEPARTMENT SPOTLIGHT



Expert talk on “Empowering Entrepreneurs: Exploring the Vibrant Startup Ecosystem of India”

This event was conducted on 10/05/23, at Dr. Abdul Kalam Hall, Electrical Engineering Dept. which was coordinated by Prof. H. S. Pandya. An interesting expert talk was delivered by Shri Harsh R Gandhi, founder of Aakaram Toys and Games LLP (Start-Up), at Ahmedabad.



Introduction to Computer Aided Engineering Drafting

Introduction to AutoCAD with hands-on skill of computer aided drafting to enhance employability was conducted on 24/02/2023 for 15 students.



Mission green campus: Plantation drive

This drive to ensure green campus responsibility was organized on 07/06/2023 and was coordinated by Prof. K. K. Bhatt. All the faculty members of the department took part enthusiastically and they selected saplings of their choice. They planted them

DEPARTMENT SPOTLIGHT

with great care and pledged to take care of this saplings until maturity.



Computer Engineering & Information Technology Department

Seminar on SSIP 2.0

The Seminar was conducted for 3rd year students to make them aware regarding the SSIP 2.0 on 16/02/2023. It was an interactive session in which the significance of start-ups and innovation were discussed. Students were approached to get the benefit of SSIP 2.0 to convert their idea into a product. The guidelines of SSIP 2.0 were highlighted in this program.



Mechanical & Automobile Engineering Department

Awareness seminar on new SSIP policy

A student startup and innovation policy 2.0 awareness program organized on 06/01/2023 for more than 115 students was very informative. They have actively participated in the program and explored the method of availing financial assistance for any innovative idea. Prof. P. M. Mistri covered all the aspects related to start-up and innovation and created enthusiasm among the students.



DEPARTMENT SPOTLIGHT

Seminar on prepare yourself before entering in industry

This seminar organized on 16/03/2023 provided valuable insights into the skills and knowledge necessary for success in the industry. It was steered by Mr. Naimesh Shethiya, Director, Sopan Institute of Engineering & Design Ahmedabad for more than 90 students who actively participated in the session and interacted with the speaker.



“Learning gives creativity, creativity leads to thinking, thinking provides knowledge, and knowledge makes you great.”

“Don’t take rest after your first victory because if you fail in the second, more lips are waiting to say that your first victory was just luck”

Dr APJ Abdul Kalam.

RESEARCH AND OUTREACH

Computer Engineering & Information Technology Department

Prof. M. M. Goyani has published a research paper on “Shot segmentation and reply detection for cricket video summarization” in IEEE international conference on Computational Intelligence and Sustainable Engineering Solutions, April., 2023.

Prof. M. M. Goyani has published a research paper on “A transition of face recognition to mask face recognition using improved attention DL model” in 3rd IEEE International Conference on Intelligent Technologies, June., 2023.

Prof. N. N. Maltare and Prof. S. A. Vahora has published a research paper on “Air Quality Index prediction using machine learning for Ahmedabad city” in Digital Chemical Engineering, ISSN: 2772-5081 June, 2023.

Prof. S. A. Vahora delivered an expert session on Introduction to Latex on 29th April 2023 at L. D. College of Engineering, Ahmedabad (online mode)

Mechanical & Automobile Engineering Department

Prof. M. M. Madhikar delivered expert session on Photography at GEC Valsad on 20/04/2023 and 21/04/2023.

“Engineering is the art of modelling materials we do not wholly understand, into shapes we cannot precisely analyse so as to withstand forces we cannot properly assess, in such a way that the public has no reason to suspect the extent of our ignorance”.

Dr. AR Dykes.

**British Institution of Structural
Engineers**

PARTICIPATION AND ACHIEVEMENTS

PARTICIPATIONS

Applied Mechanics & Civil Engineering Department

Prof. A. J. Patel has participated in NPTEL-AICTE faculty development program on Concrete technology during April 2023 organized by SWAYAM NPTEL.

Prof. A. J. Patel has participated in NPTEL-AICTE faculty development program on Structure, Form, and Architecture : The Synergy during March 2023 organized by SWAYAM NPTEL.

Prof. M. M. Bhunga has participated in NPTEL-AICTE faculty development program on Concrete technology during April 2023 organized by SWAYAM NPTEL.

Prof. M. M. Bhunga has participated in NPTEL-AICTE faculty development program on Structure, Form, and Architecture : The Synergy during March 2023 organized by SWAYAM NPTEL.

Prof. V. R. Gor has participated in NPTEL-AICTE faculty development program on English language for competitive exam during April 2023 organized by SWAYAM NPTEL.

Electronics & Communication Department

Prof. N. D. Patel has participated in NPTEL-AICTE faculty development program on Op-Amp Practical Applications: Design, Simulation and Implementation during April 2023 organized by SWAYAM NPTEL.

Prof. M. S. Chauhan has participated in NPTEL-AICTE faculty development program on Op-Amp Practical Applications: Design, Simulation and Implementation during April 2023 organized by SWAYAM NPTEL.

Prof. K. R. Patel has participated in NPTEL-AICTE faculty development program on Op-Amp Practical Applications: Design, Simulation and Implementation during April 2023 organized by SWAYAM NPTEL.

Prof. S. H. Mansuri has participated in NPTEL-AICTE faculty development program on Op-Amp Practical Applications: Design, Simulation and Implementation during April 2023 organized by SWAYAM NPTEL.

Computer Engineering & Information Technology Department

Prof. S. A. Vahora has participated in one week Training on Promoting Innovations and Entrepreneurship in Technical & Vocational Professionals during 30/01/2023 to 03/02/2023 organized by NITTTR, Bhopal.

Prof. S. A. Vahora has participated in NPTEL-AICTE faculty development program on Introduction to programming in C March 2023 organized by SWAYAM NPTEL.

Prof. R. J. Prajapati has participated in NPTEL-AICTE faculty development program on Database Management System March 2023 organized by SWAYAM NPTEL.

Prof. S. G. Patel has participated in NPTEL-AICTE faculty development program on Cloud Computing March 2023 organized by SWAYAM NPTEL.

Prof. A. K. Dodiya has participated in NPTEL-AICTE faculty development program on Cloud Computing March 2023 organized by SWAYAM NPTEL.

Prof. H. R. Patel has participated in NPTEL-AICTE faculty development program on The Joy of Computing using Python during April 2023 organized by SWAYAM NPTEL.

PARTICIPATION AND ACHIEVEMENTS

Prof. A. B. Parmar has participated in one week Training on Emotional Intelligence in Teaching and Learning during 16/01/2023 to 20/01/2023 organized by NITTTR, Bhopal.

Prof. R. N. Vaza has participated in one week Training on Emotional Intelligence in Teaching and Learning during 16/01/2023 to 20/01/2023 organized by NITTTR, Bhopal.

Prof. M. V. Chauhan has participated in Induction Phase Program 1 during 06/02/2023 to 17/02/2023 organized by NITTTR, Bhopal.

Mechanical & Automobile Engineering Department

Prof. P. M. Mistri has participated in one week Training on Train the trainer (Paint Technology) during 27/03/2023 to 31/03/2023 organized by iACE, Gandhinagar.

Prof. V. J. Chauhan has participated in one week Training Outcome based education during 20/02/2023 to 24/02/2023 organized by NITTTR, Bhopal.

Prof. P. M. Mistri has participated in NPTEL-AICTE faculty development program on Cooling Technology: Why and How Utilizesd in food processing and allied industries Technology during 23/01/2023 to 14/04/2023 organized by SWAYAM NPTEL.

Prof. B. C. Khatri has participated in 58th faculty development program on Design Engineering (Level 1) during 24/04/2023 to 29/04/2023 organized by GTU.

Prof. R. B. Shah has participated in 58th faculty development program on Design Engineering (Level 1) during 24/04/2023 to 29/04/2023 organized by GTU

Prof. J. C. Gamit has participated in NPTEL-AICTE faculty development program on Cooling Technology:

Why and How Utilizes in food processing and allied industries Technology during 23/01/2023 to 14/04/2023 organized by SWAYAM NPTEL.

Prof. J. C. Gamit has participated in NPTEL-AICTE faculty development program on "The Joy of Computing using Python" during 23/01/2023 to 14/04/2023 organized by SWAYAM NPTEL.

Prof. J. C. Gamit has participated in NPTEL-AICTE faculty development program on Viscous Fluid Flow during 23/01/2023 to 14/04/2023 organized by SWAYAM NPTEL.

Prof. J. C. Gamit has participated in NPTEL-AICTE faculty development program Intellectual Property during 23/01/2023 to 14/04/2023 organized by SWAYAM NPTEL.

PARTICIPATION AND ACHIEVEMENTS

ACHIEVEMENTS

Prof. V R. Gor from Civil Engineering Department has successfully qualified for the award of the Doctor of Philosophy (Ph.D.) on 21st February 2023 from Gujarat Technological University.

Prof. K. K. Bhatt from Electrical Engineering Department, GEC Modasa, Has successfully accomplished his Doctorate in Philosophy, in Electrical Engineering on Experimental Investigation on Harmonic Profile Improvement in Multilevel Inverter on 24th July 2023, from Institute of Technology and Engineering, Indus University.

Prof. R. N. Vaza from Computer Engineering Department has successfully qualified for the award of the Doctor of Philosophy (Ph.D.) on 1st June 2023 from Gujarat Technological University.

Two students have completed Doctor of Philosophy (Ph.D.) under the guidance of **Prof. Jeetendra Vadher** from Mechanical Engineering Department during Jan to June 2023.

Prof. M. J. Vanajara from Mechanical Engineering Department Completed his Ph.D. in Experimental Investigation for the flow of R32 in a Capillary Tube from India Institute of Technology Roorkee under the guidance of Dr. Ravi Kumar on 06th April 2023.

Prof. S. P. Patel from Mechanical Engineering Department Completed his Ph.D. in Influence of Bio Lubricant on Tribological Assessment in CI Engine Fueled with Bio Diesel Blend from Gujarat Technological University under the guidance of Dr. P. K. Brahmabhatt on 26th Jun 2023.

Prof. Samruddhi P. Patel from Mechanical Engineering Department Completed her Ph.D. in Vibration based fault diagnosis of localized and distributed defects generated on roller bearing from

Gujarat Technological University under the guidance of Dr. U. V. Shah on 26th Jun 2023

Prof. Dipak J. Prajapati has been awarded the Best Paper award in the category of Communication and Control Systems for the paper titled Output Feedback Scheme Based Network Synchronization of a Class of Discrete Time Systems in Chain and Ring Topology presented in the International Conference on Communication and Intelligent Systems held online during December 19-20, 2022 on 2nd May 2023.

Prof. J. C. Gamit from Mechanical Engineering Department recognized as NPTEL BELIEVER during Jan-Apr 2023.



PARTICIPATION AND ACHIEVEMENTS

Jashesh Mehta, Nainesh Nagekar, Mayuri Mehta, Prashant Modi, Safvan Vahora, Anil A. Prajapati from Computer Engineering and Information Technology department published an Indian Patent on An IOT Based Pneumatic ICU Hospital Bed with Electric Abs Panel and Railing. Patent Application no. 202321018251. The Patent Office Journal No. 14/2023 Dated 07/04/2023.

Application Details	
APPLICATION NUMBER	202321018251
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	17/03/2023
APPLICANT NAME	1. Mr. Jashesh Mehta 2. Prof. Nainesh Vasantbhai Nagekar 3. Dr. Mayuri Mehta 4. Prof. Prashant Sureshbhai Modi 5. Dr. Safvan Vahora 6. Prof. Anil A. Prajapati
TITLE OF INVENTION	AN IOT BASED PNEUMATIC ICU HOSPITAL BED WITH ELECTRIC ABS PANEL AND RAILING
FIELD OF INVENTION	BIO-MEDICAL ENGINEERING
E-MAIL (As Per Record)	info@lexgin.com
ADDITIONAL-EMAIL (As Per Record)	chandra.amrish@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	07/04/2023

Dave Javal Atulkumar (200160713004) of Civil Engineering department participated and received Gold Medal at GICEA for getting 2nd rank in GTU on 12/02/2023.



Rutul Virani, Nainesh Nagekar, Mayuri Mehta, Aniruddhsinh K. Dodiya, Upendra R. Bhoi, Amit B. Parmar from Computer Engineering and Information Technology department published an Indian Patent on A Novel IOT-Based Digital Magnetic Resonance Cardiovascular Health Analyzer Machine. Patent Application no. 202321018250. The Patent Office Journal No. 14/2023 Dated 07/04/2023.

Application Details	
APPLICATION NUMBER	202321018250
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	17/03/2023
APPLICANT NAME	1. Mr. Rutul Virani 2. Prof. Nainesh Vasantbhai Nagekar 3. Dr. Mayuri Mehta 4. Prof. Aniruddhsinh K. Dodiya 5. Prof. Upendra R. Bhoi 6. Prof. Amit B. Parmar
TITLE OF INVENTION	A NOVEL IOT BASED DIGITAL MAGNETIC RESONANCE CARDIOVASCULAR HEALTH ANALYZER MACHINE
FIELD OF INVENTION	BIO-MEDICAL ENGINEERING
E-MAIL (As Per Record)	info@lexgin.com
ADDITIONAL-EMAIL (As Per Record)	chandra.amrish@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	07/04/2023

Two teams of Electrical Engineering Department were selected in final round of Azadi ka Amrut Mohatsav Hackathon under mentorship of Prof. K. K. Bhatt and Prof. H. S. Pandya organized during 10/02/2023 to 11/02/2023.



FORTHCOMING EVENTS

Etabs Workshop

Civil engineering department will organize a workshop designed for civil engineers, structural engineers, and anyone else who is interested in learning how to use ETABS for structural analysis and design. The workshop will cover a wide range of topics, from basic operations to advanced topics. Participants will have the opportunity to learn from an experienced instructor and to practice what they have learned on real-world projects. The workshop will be held over a period of 15 days, with each day consisting of 8 hours of instruction. The workshop will be held in a classroom setting, with access to computers and software.

Site Visit

Civil engineering department will organize a site visit for manufacturing unit for prefabricated building on 19/8/2023.

Webinar on Placement Opportunities in Smart Grid

Electrical engineering department will organize a webinar on Placement Opportunities in Smart Grid India on 05/08/2023.



GOVERNMENT ENGINEERING COLLEGE, MODASA
ELECTRICAL ENGINEERING DEPARTMENT

ORGANIZE
A Webinar on
Placement Opportunities in Smart Grid

Patron
Dr. B.J. Shah
Principal, Gec-Modasa

Convener
Dr. V.J. Upadhyay
HOD-GECEM-EED

Date: 05/08/2023, Saturday
Time: 1 p.m. onwards
Place: GOOGLE MEET,
<https://meet.google.com/cop-rttw-jxm>
Key Speaker: 1. Prof. N.V. Upadhyay
2. Dr. H.S. Pandya
3. Prof. D.U. Thakar

Workshop on Concrete Mix Design

Civil engineering department will organize a workshop on concrete on 2/9/2023.

Webinar on Electives awareness Session

Electrical engineering department will organize a webinar on Elective Awareness Session on 05/08/2023.



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ELECTRICAL ENGINEERING DEPARTMENT

ORGANIZE
A Webinar on
Electives Awareness Session

Patron
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Principal, Gec-Modasa

Convener
Dr. V.J. Upadhyay
HOD-GECEM-EED

Date: 05/08/2023, Saturday
Time: 2 pm onwards
Place: GOOGLE MEET,
<https://meet.google.com/cop-rttw-jxm>
Key Speaker: Dr. Prof. V. Upadhyay
Prof. N.V. Upadhyay

Adani Industry Visit

Computer Engineering and Information Technology department plans to organize an industrial visit to Mundra port for the 5th semester students in August.

Innovation and student start-up policy

Mechanical Engineering department will organize a seminar on Innovation and student start-up policy on 27/07/2023.

TRENDING TECH TALKS

The Skill of the 21st Century - Artificial Intelligence (AI) and Machine Learning

Artificial intelligence, or AI, has collected a lot of publicity over the past many years, and it is still one of the newest technological revolutions because its implications on how we live, work, and play are just beginning. AI is already well-known for its excellence in a wide range of fields, including smartphone personal assistants, image and speech recognition, navigation apps, and much more. AI is already everywhere, from Siri and Ok Google to a variety of video games with virtual players and social media tools. It is without a doubt the topic that is now being discussed in the most businesses. It is currently the most exciting and in-demand employment field available.

In addition, AI will be used to examine interactions in order to uncover underlying relationships and insights, to forecast demand for services like hospitals so that decision-makers can allocate resources more effectively, and to identify shifting customer behavior patterns by analyzing data almost instantly. These applications will increase revenue and improve personalized experiences.

By 2025, the AI market will be worth \$190 billion, with over \$57 billion expected to be spent globally on cognitive and AI systems in 2023. New jobs will be created in development, programming, testing, support, and maintenance, as AI spreads throughout industries. The top new technological trend to watch out for is AI, which offers some of the highest incomes available today, ranging from over \$1,25,000 per year (machine learning engineer) to \$145,000 per year (AI architect).

A tremendous demand for trained workers is being generated by the deployment of machine learning, a subset of artificial intelligence. By 2025, AI, machine learning, and automation are expected to provide 9% of all new jobs in the United States. These jobs will include those for robot monitors, data scientists, automation specialists, and content curators.

Mastering AI and ML offer a wide range of career paths, including:

- AI/ML Engineer: Develop and implement machine learning algorithms and models.
- Data Scientist: Analyze and interpret complex data sets to derive insights.
- Research Scientist: Work on cutting-edge research to advance AI technologies.
- Computer Vision Engineer: Develop systems for analyzing and interpreting visual information.
- Natural Language Processing (NLP) Engineer: Focus on language-related AI applications.
- AI Ethics Specialist: Address ethical concerns and biases in AI systems.
- AI Product Manager: Oversee the development and deployment of AI-powered products.
- Robotics Engineer: Design and develop autonomous systems and robots.

In the future of technology and business, AI and ML will be essential; they are not fads. Because of this, professions in this industry are probably going to be useful and influential for a long time.

In conclusion, career opportunities in AI and ML are not only abundant but also crucial for driving technological advancements and solving complex problems across industries. Professionals in this field have the chance to shape the future of technology and make a positive impact on society. Many people consider AI to be the skill of the century since its uses are endless.

- **Prof. P. S. Modi, Information Technology Department.**

Electric Vehicles Growth in India in 2023

The cumulative EV sales in India reached 23,37,761 units by the end of FY2023. While the annual EV sales crossed 12 lakh vehicles in FY2023 with more than 60% of the share accounted for by registered electric two-wheelers (E2W) followed by passenger electric three-wheeler (E3W P) with ~29% market share.

State-wise EV Sales: Uttar Pradesh, Maharashtra, Delhi, Karnataka, and Rajasthan were the top EV-selling states between FY2014 and FY2022, accounting for more than 50% of the market share. In terms of FY2023 sales share, Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, and Gujarat were the top EV-selling states.

Electric two- and three-wheelers, the two 'low-hanging fruits' of the industry and the more affordable segments compared to electric cars, goods carriers or buses, understandably have been the main growth drivers of the sales in first-half CY2023. While e-two-wheelers, with 434,914 units, account for 60% of the total sales, three-wheelers (246,270 units) have a 34% share of the EV pie. A total of 38,359 electric cars and SUVs were also sold, which gives them a 5.31% share, with commercial vehicles comprising goods carriers and buses getting a 0.28% share with 2,079 units

Cumulative numbers received a boost with record EV sales of over 150,000 units in May and the first-half CY2022 total would have gone past the 750,000-units mark but for the sharp 56% month-on-month decline in June sales in the two-wheeler segment. Following the scaling down of the FAME II subsidy from 40% to 15% and the resultant hiked prices of e-scooters and e-motorcycles from June 1, electric two-wheeler sales hit a 11-month low of 45,734 units last month. June e-two-wheeler retail sales are down 56% on May 2023's record numbers but they also point to a gradual maturing of the market as consumers bought 45,734 e-two-wheelers at higher prices.

It is to be noted that June 2023 was the ninth month in a row that EV sales in India have gone past the 100,000-units mark, albeit at 101,832 units, last month's sales are the lowest of the nine months, dropping below January 2023's 102,839 units.

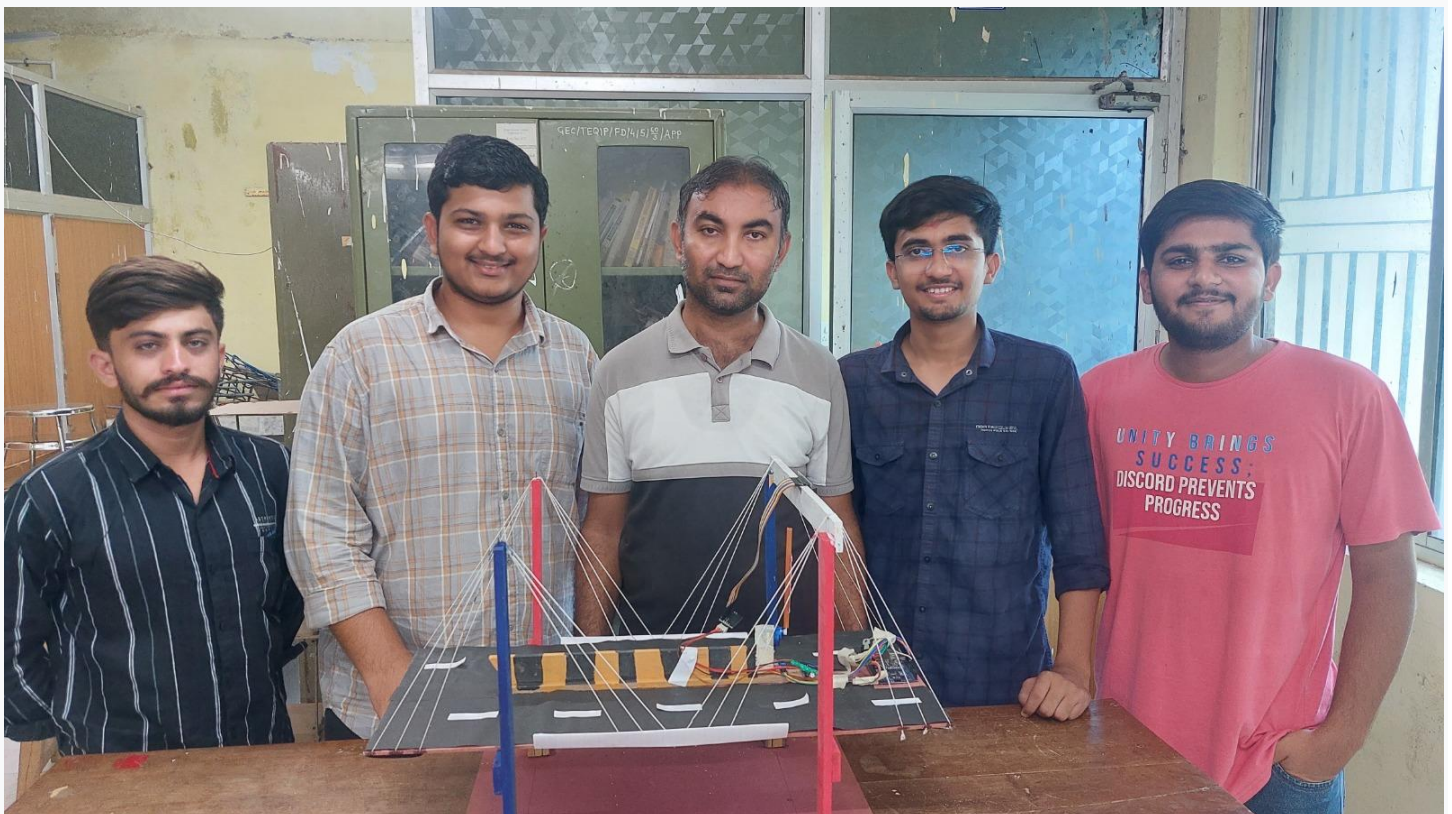
Ola Electric, which remains the market leader by a fair margin – 38% share – sold a total of 17,552 units, down 39% MoM (May 2023: 28,629 units). This performance is level with its February 2023 sales of 17,757 units. TVS Motor Co holds onto its second rank with sales of 7,791 iQube e-scooters last month, down 62% on May 2023's 20,397 units. It is followed by Ather Energy with 4,540 units, down 49% (May 2023: 15,407) and Bajaj Auto with 2,966 units (down 54%, May 2023: 9,965).

A close look at the six-month data reveals that of the total 135 OEMs in the market, the Top 10 EV makers, with sales of 391,218 units, have a 90% share of the total 434,914 units sold. Market leader Ola Electric has a stranglehold and a huge lead over its rivals. Its H1 2023 sales at 125,729 units make for a commanding 29% market share and the company is ahead of TVS Motor Co, by 48,760 units. TVS sold a total of 76,969 iQube scooters, which gives it a 17.69% share, creditable given that it retails only a single product. In third position is Ather Energy with 59,221 units and a 13.61% share.

Ampere Vehicles (39,114) and Hero Electric (25,502) are ranked fourth and fifth respectively. Bajaj Auto, which launched its Chetak in the same month as the TVS iQube is in sixth position. While Okinawa (21,503) is seventh, Okaya EV (10,124) jumps into eighth position thanks to it logging best-ever 3,876 units in May 2023, a month which saw a number of OEMs hit monthly highs due to the rush to buy EVs before they turned costlier from June 1.

CREATIVE CORNER

Social Concern leads to Innovation : To prevent tragedy like Morbi Bridge, civil engineering students Urmik Ravindrabhai Panchal, Manthan Jigneshbhai Chauhan, Harsh Navinchandra Suthar and Mitesh Gambhirsinh Dodia under the guidance of Prof. Dinesh B Sathwara of Applied Mechanics have inspired to design a sensor based smart bridge monitoring system which monitors the number of people allowed on the bridge. The sensors indicate when maximum capacity is reached, the shutters fall down, thus maintaining the capacity and preventing a repeat of a tragedy.

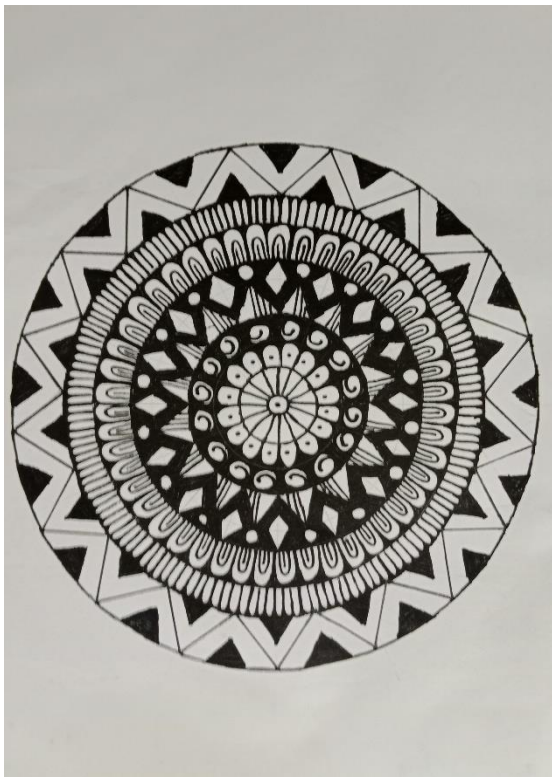


CREATIVE CORNER



Painting, Suthar Karneshbhai, Student, Electrical Engineering Department

CREATIVE CORNER



Mandala Art, Riddhi Hemkant Neve, 210160111504, Electronics and Communication Department



Drawing of Virat Kohli, Suthar Keyur H., 210160111020, Electronics and Communication Department

GECM E-News

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