

GOVERNMENT ENGINEERING COLLEGE, MODASA

Newsletter

January – June 2025

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GECEM E-NEWS

FROM THE PRINCIPAL'S DESK



It gives me immense pleasure to present the latest edition of our E-Newsletter, showcasing the vibrant academic, technical, and cultural endeavors carried out by the students and faculty of Government Engineering College, Modasa, for the period January 2025 to July 2025.

GEC Modasa is committed to the holistic development of its students by offering diverse opportunities for academic enrichment, expert lectures, industrial visits, skill-building workshops, and robust placement drives. The institute actively fosters a culture of innovation and entrepreneurship by supporting the Startup Policy and creating an ecosystem that encourages new ideas and ventures.

Our students and faculty are actively involved in initiatives that align with national missions such as Aatma Nirbhar Bharat, working closely with GTU and the Education Department to drive innovation and sustainable development. The institute is proud to be part of these collaborative efforts that contribute to

the nation's progress.

At GEC Modasa, we believe in nurturing not just engineers, but responsible citizens and innovative thinkers. This newsletter is a reflection of the hard work, dedication, and creativity exhibited by our academic community. From groundbreaking projects and technical workshops to social initiatives and cultural events, our students and faculty have continued to push boundaries and uphold the institution's spirit of excellence.

I congratulate all contributors and editorial members for their efforts in compiling this newsletter. Let it serve as an inspiration to all, and a record of our continued journey toward academic excellence and holistic development.

Let us keep striving forward with dedication and a commitment to continuous learning.

Principal (I/C)

Prof. Dr. Jeetendra A. Vadher

COLLEGE SAGA

Pravah 2025

A two-day technical symposium, Pravah 2025, was successfully organized by the institute on 6th and 7th March 2025, attracting enthusiastic participation from over 700 students. The event featured more than 30 diverse competitions and activities across various categories including Coding, Literature, Arts, Filmmaking, Culinary Arts, and Project Exhibitions.

The second day of the symposium was highlighted by vibrant stage performances, providing a platform for students to showcase their talents. The event concluded with a grand prize distribution ceremony, where winners were felicitated on stage for their outstanding performances.



SSIP CELL

SSIP Awareness Programs for Students

A series of SSIP Awareness Programs were conducted across departments to inform students about the Student Startup and Innovation Policy (SSIP) 2.0. Sessions were held for Civil and EC Engineering students on 07/02/2025 and 07/03/2025, and for Mechanical/Automobile Engineering students on 20/02/2025. The programs highlighted the SSIP 2.0 framework, departmental and institutional scrutiny processes, and the availability of support for innovative and entrepreneurial project funding. Students were encouraged to think creatively, explore real-world problems, and submit their ideas for SSIP support.



COLLEGE SAGA

Institute-Level Scrutiny of PoC Proposals

An Institute-Level Scrutiny of PoC (Proof of Concept) Proposals was conducted on 8th May 2025, under the SSIP Cell. The event aimed to evaluate innovative project proposals submitted by students across departments for potential funding and mentoring support under SSIP 2.0. A panel of faculty experts critically assessed each proposal based on innovation, feasibility, and societal impact. The scrutiny process ensured that only well-defined and impactful ideas progressed to the next stage for SSIP PoC approval and development.



RUSA

Expert Talk on “Women Empowerment: Health Awareness and Prevention”

An expert talk on “Women Empowerment: Health Awareness and Prevention” was organized by the Women Development Cell, under the guidance of Dr. J.A. Vadher, in association with RUSA. The session featured Dr. Jalpa H. Shah (M.S. Gynaecologist) as the expert speaker. She addressed key women's health issues including

breast and cervical cancer, reproductive health, and the critical role of a balanced diet and physical activity. The talk also highlighted how modern women often overlook their health due to various responsibilities. The session was interactive, including myth-busting discussions, practical health tips, and a Q&A segment. Around 100 girl students and female faculty members participated. The event concluded with certificate distribution and a vote of thanks.

Workshop on Blockchain Technology

A vocational training workshop on Blockchain Technology was organized under RUSA Component 12.0 at institute. The 7-day training program, held from 17th to 25th February 2025 at the LRC Building, aimed to provide students with a comprehensive understanding of blockchain fundamentals and applications. The sessions were led by Ms. Nikita Kotme from the Bombay Stock Exchange (BSE), who guided participants through both theoretical and hands-on aspects of blockchain development. The training covered blockchain architecture, types of blockchain networks (public, private, consortium, and hybrid), smart contracts, and decentralized applications (DApps), along with real-world use cases in finance, healthcare, supply chain, and governance.

GOVERNMENT ENGINEERING COLLEGE, MODASA

APPROVED BY: KNOWLEDGE CONSORTIUM OF GUJARAT, DEPARTMENT OF EDUCATION

A Vocational Training on **BLOCKCHAIN TECHNOLOGY**

IN ASSOCIATION WITH **BOMBAY STOCK EXCHANGE (BSE) INSTITUTE**

17-25, FEBRUARY 2025

LRC BUILDING

CONVENER: Dr. J.A. Vadher (Principal)

RUSA COORDINATOR: Dr. U.L. Makwana (Associate Prof.-EE), Rahul Shah (Assistant Prof.-ME)

RUSA 12.0 COORDINATOR: Devan Bhayani (Assistant Prof.-English)

EVENT COORDINATOR: Anil Prajapati (Assistant Prof.-IT)

SPONSORED BY: RASHTRIYA UCHCHTAR SHIKSHA ABHIYAN (RUSA) COMPONENT 12.0, GOVERNMENT OF INDIA

COLLEGE SAGA



Gymkhana

Air Force Team DISHA Interaction with College Students

The Indian Air Force's DISHA (Defence Information and Sports Hub for Awareness) team conducted a two-day outreach program at institute, on 22nd and 23rd January 2025. GEC Modasa was among the select institutions chosen for this prestigious initiative. The program featured interactive sessions, presentations, and visual displays aimed at creating awareness about life in the Indian Air Force, including various roles, training modules, and career pathways. Students enthusiastically engaged with the team, gaining first-hand insights into opportunities within the defence forces. The sessions, led by serving officers, served to both inform and inspire students to consider a career in the Indian Air Force.



Annual College Sports Fest

The Annual College Sports Fest was held in February 2025, scheduled during non-working hours mornings, evenings, and weekends to ensure maximum participation without disrupting academics. The fest featured a diverse lineup of indoor and outdoor sports, including cricket, volleyball, football, badminton, chess, and athletics. Students from all departments actively engaged in the events, demonstrating strong sportsmanship, discipline, and teamwork. Beyond competition, the fest promoted physical fitness, stress relief, and camaraderie among students. It was a dynamic celebration of talent, unity, and youthful enthusiasm, contributing to a vibrant and inclusive campus atmosphere.



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76th Republic Day Celebration

The 76th Republic Day of India was celebrated on 26th January 2025 with great patriotism and enthusiasm. The event began with the ceremonial hoisting of the national flag, followed by the national anthem and an address by the principal, emphasizing the importance of the Indian Constitution and democratic values. Students and staff actively participated in various cultural performances, patriotic songs, and speeches, showcasing unity and reverence for the nation. The celebration fostered a strong sense of national pride, civic awareness, and appreciation for India's rich democratic heritage.



Road Safety Quiz Competition under NSS

On 28th January 2025, a Road Safety Quiz Competition was organized as part of the Road Safety Awareness initiative to educate students in an engaging and interactive manner. The quiz focused on essential topics such as traffic rules, road signs, accident prevention strategies, and emergency response protocols. Designed to both test and expand students' knowledge of safe road practices, the event encouraged critical thinking and responsible behavior. Students from various departments participated enthusiastically, making the event a successful blend of learning and healthy competition.

Voters' Pledge under NSS

On 29th January 2025, as part of the national voter awareness campaign, students and faculty took the Voters' Pledge to affirm their commitment to democratic principles and responsible voting. Conducted on campus under the NSS unit, the activity aimed to encourage awareness of electoral rights and duties, emphasizing the importance of ethical voting practices. The pledge served to sensitize participants to their role in shaping the future of the nation through informed and active participation in the democratic process.



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Samapan Samaroh with RTO

On 30th January 2025, a Samapan Samaroh was conducted to mark the conclusion of Road Safety Month, in collaboration with the RTO Modasa and the District Collector of Aravalli as the chief guest. The program focused on raising awareness about traffic rules, responsible driving habits, and the broader impact of road safety. Eminent officials addressed the participants, sharing real-life incidents and vital road safety statistics. The event included interactive sessions, safety demonstrations, and a collective pledge to follow traffic norms. Students actively engaged in the discussions and activities, gaining valuable insights into the consequences of negligence on roads and the critical importance of disciplined behavior.



Campus Cleanliness Drive under

On 1st February 2025, a Campus Cleanliness Drive was conducted as part of the NSS initiative to foster hygiene, cleanliness, and environmental responsibility among students and staff. The drive covered various zones including classrooms, corridors, hostel premises, and surrounding outdoor areas. Participants actively engaged in collecting litter, segregating waste, and promoting awareness about cleanliness and sustainability

practices. The event was aligned with the objectives of the Swachh Bharat Abhiyan and aimed at cultivating a cleaner, greener, and healthier campus atmosphere. The collective effort reflected students' commitment to community service and ecological consciousness.



Blood Donation, Organ Donation & Thalassemia Awareness Campaign

On 18th February 2025, a comprehensive health awareness initiative was conducted, focusing on blood donation, organ donation, and thalassemia prevention. Organized in collaboration with certified medical organizations, the event witnessed enthusiastic participation from students, faculty, and staff. The blood donation camp followed all safety protocols, including pre-screening and professional supervision. Alongside, awareness sessions educated attendees on the significance of organ donation and the need for thalassemia screening and genetic counseling. The campaign aimed to instill a sense of social responsibility and enhance

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understanding of life-saving medical contributions.



International Yoga Day Celebration

On 21st June 2025, International Yoga Day was celebrated with great enthusiasm, bringing together students, faculty, and staff for a rejuvenating experience. A structured yoga session was organized on campus, focusing on asanas (yoga postures), pranayama (breathing techniques), and meditation to promote overall physical and mental well-being. Certified yoga instructors guided the session, emphasizing correct form, mindfulness, and the importance of consistency. Participants engaged actively and shared positive feedback about the calming and energizing effects of the practice. The event highlighted the significance of yoga as a tool for maintaining a balanced lifestyle and managing stress effectively.



Participation in Khel Mahakumbh

In 2025, a group of 80 students from the institute actively participated in Khel Mahakumbh 2025, a flagship state-level sports initiative aimed at promoting athletic excellence and community sports engagement. Students took part in various disciplines, demonstrating teamwork, physical fitness, and competitive enthusiasm. A highlight of the event was Prof. P.V. Patel's victory in the doubles event, earning him a place to represent Aravalli district at the state-level tournament held in Rajkot. The participation reflected the strong sporting culture nurtured within the institute and the dedication of both students and faculty toward holistic development through sports.



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Applied Mechanics & Civil Engineering Department

Site Visit on Prestressed Concrete Technology – New Railway Station, Modasa

A site visit was organized on 4th February 2025 to the construction site of the new railway station near the Police Quarters in Modasa. The primary focus was to observe the practical implementation of Prestressed Concrete Technology in large-scale infrastructure works. Students observed key activities such as prestressed beam casting, tendon placement, tensioning techniques, anchorage systems, and curing methods. On-site engineers provided valuable technical explanations, highlighting the structural and economic advantages of prestressing. The visit was coordinated by Dr. A. J. Patel, who facilitated meaningful interactions between students and professionals, enhancing their real-world understanding of civil engineering practices.



Internship Site Inspection – Himmatnagar

On 6th February 2025, Dr. A. J. Patel conducted an official inspection visit to internship sites in

Himmatnagar and Modasa to assess the involvement and learning outcomes of final-year B.Tech students. The inspection focused on evaluating students' engagement in core civil engineering tasks such as structural supervision, site management, quantity estimation, and material testing. The visit ensured that internships were aligned with academic goals and that students were gaining practical, hands-on experience relevant to their field.



Site Visit to Eco-Friendly Residence at Nandan Van, Modasa

On 20th March 2025, a site visit was conducted to an eco-friendly residence located at Nandan Van, Modasa, known for its sustainable construction using locally available sand and bamboo. The house, owned by a reputed doctor, showcases an innovative approach to green building. Students had the opportunity to observe the practical application of natural materials in construction, focusing on structural performance, aesthetics, and environmental sustainability. The visit highlighted low-carbon construction techniques, traditional craftsmanship, and the potential of renewable materials in modern residential design. Dr. A. J. Patel coordinated the visit and facilitated

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student interactions with the design team to enhance understanding of sustainable practices.



Elective Subject Orientation Sessions

On 16th and 26th June 2025, orientation sessions were conducted for 7th and 5th semester students to guide them in selecting appropriate elective subjects for the upcoming academic term. The sessions, led by Dr. A. J. Patel, were held in both online and offline modes to ensure maximum participation. Students were briefed on the relevance, scope, and future applications of various elective courses, enabling them to make informed academic choices aligned with their interests and career goals.

Electrical Engineering Department

Vocational Training on Electrical CAD

A group of 30 students from Department successfully completed vocational training in Electrical CAD at Indo-German Tool Room, Ahmedabad, from 3rd to 18th February 2025. The participants included students from both the 4th and 6th semesters. The training provided in-depth, hands-on experience in computer-aided design

specifically tailored for electrical systems. The program significantly enhanced students' practical skills, bridging the gap between academic learning and industry requirements. The exposure to real-world tools and applications has equipped them with essential technical competencies and improved their industry readiness.

IEI Student Membership Enrollment

A total of 50 students from the Department enrolled as student members of The Institution of Engineers (India) – IEI for the academic year 2024–25. These students, currently in their 2nd year and expected to graduate in 2027, have registered under the membership code 383315/GECEM/EL. The IEI membership promotes professional development by offering access to technical seminars, workshops, industry-oriented events, and collaborative learning platforms. This initiative marks a proactive step by the department and students to foster a culture of continuous learning and professional engagement in the engineering field.

Industrial Visit to Veer Electronics, Gandhinagar

On 25th February 2025, Department organized an industrial visit to Veer Electronics, Gandhinagar. A total of 21 students participated in the visit, accompanied by faculty coordinators Prof. M.J. Patel and Prof. J.B. Pujara. The visit offered valuable hands-on exposure to the design, manufacturing, and calibration processes of electrical testing instruments. Students explored real-world applications of theoretical concepts and observed quality control practices and

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emerging technologies in the electrical industry. The experience helped strengthen their practical understanding and industry readiness.



Industrial Visit to Raj Sales EV Manufacturing, Ahmedabad

On 11th March 2025, 21 students from the Department, visited Raj Sales EV Manufacturing, Ahmedabad. The visit was coordinated by Dr. K.K. Bhatt and Dr. H.S. Pandya. This industry interaction provided students with an immersive experience in electric vehicle (EV) manufacturing, covering areas such as motor integration, Battery Management Systems (BMS), and energy control mechanisms. The students gained valuable insights into cutting-edge technologies, real-world industry challenges, and the crucial role of electrical engineers in driving the future of green mobility. The visit inspired students to consider sustainable solutions in their future projects and careers.



Seminar cum Workshop on “Energy Conservation and Energy Audit Awareness”

To foster sustainability and practical knowledge, the Department organized a seminar cum workshop on “*Energy Conservation and Energy Audit Awareness*” on 21st February 2025. The session was led by expert speaker Mr. Amarpal Kanojiya, who shared in-depth insights on energy-saving strategies, audit methodologies, and the role of renewable energy integration. Students and faculty members actively participated in the interactive session, discussing real-world energy challenges and solutions. The workshop

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effectively bridged the gap between theoretical learning and practical applications in the field of energy management and conservation.



GOVERNMENT ENGINEERING COLLEGE, MODASA
ELECTRICAL ENGINEERING DEPARTMENT
ORGANIZE
A Workshop cum Seminar
ON
Energy Conservation and Energy Audit Awareness
Date: 21/02/2025, Friday
Time: 11 p.m. Onwards
Place: 7202, Seminar Hall, Electrical Department, GECEM-EED
Key Speaker: Prof. Amarpal Kanojiya
(Director at Kuber Education Trust & Green Solar)
Patron: Dr. JEETENDRAKUMAR VADHER, Principal, Gec-Modasa
Convener: Dr. V.J. Upadhyay, HOD-GECEM-EED
Faculty Co-ordinator: Prof. N.V. Upadhyay, Prof. D.U. Thakar, Asst. Prof. - GECEM-EED

Expert Lecture on “Introduction to IGTR Training: Electrical CAD, PLC, and SCADA”

The department conducted an expert lecture on “Introduction to IGTR Training: Electrical CAD, PLC, and SCADA” on 16th January 2025. The session was delivered by Prof. Darshan U. Thakar and was attended by 37 students. The lecture provided a foundational understanding of key industrial automation tools and introduced students to training opportunities offered by the Indo-German Tool Room (IGTR). The session highlighted the practical applications of Electrical CAD, PLC, and SCADA in modern industries, as well as associated career paths. It encouraged students to pursue skill development in these areas, enhancing their industry readiness.



Expert Session on “Selecting Electives for 7th Sem Made Easy”

An expert session titled “Selecting Electives for 7th Sem Made Easy” was organized by the Department, on 8th April 2025. The session was conducted by departmental faculty and attended by 39 students. It aimed to support students in making well-informed elective course selections that align with their individual interests, academic strengths, and future career goals. The session included practical guidance, academic insights, and interactive discussions, helping students understand the relevance and scope of various elective options. The initiative empowered students to approach the elective selection process with clarity and confidence.

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Industrial Visit to Amul Dairy, Gandhinagar

On 24th February 2025, 21 students participated in an industrial visit to *Amul Dairy*, Gandhinagar. The visit was coordinated by Dr. V.J. Upadhyay and Prof. M.J. Patel. Students gained real-time exposure to advanced dairy processing systems, including automated milk handling, quality assurance protocols, and the energy infrastructure behind large-scale dairy operations. Additionally, the visit provided an overview of Amul's cooperative model and the integration of technology in ensuring efficiency and quality across its supply chain. The experience enhanced students' understanding of industrial automation, energy utilization, and real-world engineering applications in the food processing sector.



Industrial Visit to Australian Premium Solar (India) Ltd., Prantij

On 12th March 2025, 11 students visited *Australian Premium Solar (India) Ltd.*, Prantij, accompanied by Dr. K.K. Bhatt and Dr. H.S. Pandya. The visit provided an in-depth understanding of solar panel manufacturing, covering both monocrystalline and polycrystalline modules, along with insights into EPC services and stringent quality control measures. Students gained valuable exposure to real-world applications of renewable energy technologies and the operational aspects of a large-scale solar production facility. The experience enhanced their technical knowledge and awareness of sustainable energy solutions.

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Expert Lecture on “Indian Armed Forces – A Way of Life”

An expert lecture on “*Indian Armed Forces – A Way of Life*” was held at Government Engineering College, Modasa, on 21st January 2025. Delivered by Capt. Shivam Shalet, the session was attended by 37 students and faculty members from the Electrical Engineering Department. Capt. Shalet provided a captivating overview of life in the Indian Armed Forces, emphasizing the core values of duty, discipline, and determination. The session covered leadership development, military lifestyle, and career opportunities within the forces. His personal experiences and motivating stories ignited a sense of patriotism and inspired students to consider the armed forces as a potential career path.



Electronics & Communication Department

Industrial Visit to BISAG-N, Gandhinagar

An industrial visit was organized on 13th March 2025 to BISAG-N (Bhaskaracharya National Institute for Space Applications and Geo-informatics), Gandhinagar, for 28 students from the 4th and 6th semesters. The visit provided students with valuable insights into advanced applications of geospatial technologies, satellite communication, and remote sensing in various sectors. During the session, students observed live demonstrations, interacted with experts, and explored real-time project implementations. The visit aimed to bridge academic knowledge with industry practices and enhance students' understanding of spatial data analytics and digital mapping solutions.

Poster Presentation by Final Year Students

A Poster Presentation event was conducted on 24th April 2025 for final-year students following the completion of their internship duration. Students showcased the work carried out during their industrial internships through well-designed posters. The event provided a platform for them to reflect on their learning, demonstrate practical applications of academic knowledge, and share industry exposure with peers and faculty. Evaluators assessed the presentations based on clarity, technical depth, and relevance of work experience. The session encouraged technical communication, critical thinking, and interaction among students.

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Drone Demonstration – Vikas Saptah Celebration

As part of the Vikas Saptah celebrations, a drone demonstration was organized on 21st November 2024 to showcase the fundamentals and real-world applications of drone technology. Faculty members conducted a live flying session and explained key components such as flight controllers, sensors, and navigation systems. The demonstration highlighted applications in agriculture, surveillance, and disaster management. Students actively engaged with the session, gaining practical insights into drone operation and its role in emerging technologies. The event aligned with the Digital India initiative,

fostering interest in tech-based solutions for societal development.



Computer Engineering & Information Technology Department

Swarajya Jashn 2k25

Swarajya Jashn 2k25, organized by the Technopreneur Club on 24th January 2025, was a spirited celebration of patriotism, culture, and creativity. The event featured a variety of performances including singing, dancing, speeches, short films, social media reels, and a distinctive Talwar Raas, reflecting the essence of India's cultural heritage and national pride. With the participation of 51 students, the event created an engaging platform for youth expression and unity. The celebration left a lasting impression on the audience through its vibrant and meaningful presentations.

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Code Fusion 2K25

Code Fusion 2K25, organized by the Technopreneur Club on 14th February 2025, sparked enthusiasm for programming and problem-solving through two key events — Mind Maze and Bug Quest. With the participation of over 250 students, the competition tested logical thinking, debugging capabilities, and real-world coding skills. These activities were designed to simulate interview scenarios and industry-level challenges, helping students sharpen their technical acumen and build confidence. The event provided a competitive yet collaborative platform for students to demonstrate their skills and engage in peer learning.



Secure Minds

Secure Minds, an initiative by the Technopreneur Club, aimed to promote awareness on pressing issues such as mental health, cyber fraud, and harassment. Conducted at Government Engineering College, Modasa, the event featured expert talks, short films, and interactive sessions that engaged students in meaningful conversations around personal safety and psychological well-being. By addressing real-life challenges faced by today's youth—both online and offline—the initiative encouraged empathy, vigilance, and responsible digital behavior. The sessions were impactful in building a supportive campus environment and fostering a culture of openness, resilience, and mutual respect.



Sailing The Sea of C

Sailing The Sea of C was a 3-day immersive hands-on C programming workshop organized by the Technopreneur Club. The event attracted over 150 enthusiastic students who were guided through core programming concepts including loops, arrays, functions, pointers, and file handling. Sessions were led by experienced mentors and focused on bridging the gap between classroom theory and practical implementation. Participants engaged in coding exercises and real-time

DEPARTMENT SPOTLIGHT

problem solving, gaining clarity on fundamental C concepts that are essential for technical interviews, academic success, and future development work.



Mechanical & Automobile Engineering Department

Webinar on “Career Opportunities after B. E. & Other Competitive Examinations”

The Department organized a webinar on “*Career Opportunities after B.E. & Other Competitive Examinations*” on 20th February 2025. The session was conducted by Prof. Mukesh Rai, Faculty Mentor at Acumen, GATE Academy. The program was coordinated by Dr. P.M. Mistri, Prof. M.G. Patel, Prof. H.I. Chaudhari, and Prof. K.V. Fadadu, under the guidance of Dr. U.V. Shah and Dr. S.P. Patel, Head of the Department. Prof. Rai provided valuable insights into various competitive examinations including GATE, along with preparation strategies and career prospects after B.Tech. With over 100 students participating, the session encouraged interactive discussions and

offered practical advice for pursuing higher studies and government or public sector careers.

**Government Engineering College, Modasa**
Approved by AICTE
Affiliated to GEC
Administered by GEC

**acumen**
GATE ACADEMY

**edEklavya**

**LIVE WEBINAR****20th FEB, 2025****Time 11 am.****Career Opportunities after B.Tech & Other Competitive Examinations.****Prof. Mukesh Rai****Organized for:**
Mechanical and Automobile Engineering Students**Patron**
Dr. J. A. Vadher (Principal)**Event Coordinator**
Dr. Piyushkumar M. Mistri (Assistant Professor, MED)
Prof. M. G. Patel (Assistant Professor, MED)
Prof. K. V. Fadadu (Assistant Professor, Auto)
Prof. H. I. Chaudhari (Assistant Professor, MED)**Heads of the Department**
Dr. U. V. Shah, Professor
Head of Mechanical Engineering Department.
Dr. S. P. Patel, Associate Professor
Head of Automobile Engineering Department.

Webinar on “Career Counseling”

The Department organized a webinar on “Career Counseling” on 6th March 2025. The session was conducted by Mr. Meet Soni, a seasoned career counselor with over 11 years of experience and Founder of Zenith Mercury Solutions. The program was coordinated by Dr. P.M. Mistri, Prof. M.G. Patel, Prof. H.I. Chaudhari, and Prof. K.V. Fadadu, under the guidance of Dr. U.V. Shah and Dr. S.P. Patel, Head of the Department. Mr. Soni provided insightful guidance on effective career planning and management strategies, while introducing

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students to a range of career paths within the engineering domain. The session, attended by over 60 participants, encouraged open dialogue and helped students gain clarity about their professional aspirations.



"AI will be an integral part of solving the world's biggest problems, but it must be developed in a way that reflects human values."

Satya Nadella,

CEO of Microsoft

RESEARCH AND OUTREACH

Applied Mechanics & Civil Engineering Department

Prof. S. S. Singh delivered an expert talk on “Health, Safety & Environmental Considerations in Concrete Technology Industry” at Adani University, Ahmedabad on 2nd April 2025.

Electrical Engineering Department

Prof. Chetan Bariya has published a research paper on “An Efficient Real-Time Model of a Five-Level Modular Multilevel Converter with Modified Pulse Width Modulation Technique for Reduced Switching Frequency” in Measurement & Control (ISSN: 2051-8730).

Prof. Tejalkumar Chaudhari has published a research paper on “Analysis and Advancements of the State of Charge Estimation Methods in Smart Battery Management System Supported by Lithium-Ion Battery Operated Electric Vehicles” in Next Energy (ISSN: 2949-821X).

Prof. Darshan U. Thakar has published a research paper on “Evaluation of Control Strategies for Induction Motors in EVs: A Focus on DTC, and Fuzzy Logic DTC” in International Research Journal on Advanced Engineering Hub (ISSN: 2584-2137).

Prof. Nirali Upadhyay, Prof. Kaushal Bhatt, and Prof. Hemang Pandya have published a research paper on “Applications of Artificial Intelligence and Machine Learning in Power System Operation and Control: A Comprehensive Review” in Communications on Applied Nonlinear Analysis (ISSN: 1074-133X).

Electronics & Communication Department

Prof. Nirav Patel has published a research paper on “A Novel Approach to Enhancing Spectral Efficiency in Massive MIMO Using Optimal Pilot Reuse Factor and Receive Combining Techniques” in International Journal of Advanced Technology and Engineering Exploration (ISSN: 2394-5443 [Print], 2394-7454 [Online]), Volume 12, Issue 127, pp. 991–1009, published on 25th June 2025 by The ACCENT Social and Welfare Society, India.

Computer Engineering & Information Technology Department

Prof. Mahesh Goyani has published a research paper on “Least Variance Based Modeling of Heart Disease Prediction System Using Ensemble Technique” in Grenze International Journal of Engineering and Technology (ISSN: 2395-5295), Volume 11, Issue 1, pp. 2467–2473, published on 1st January 2025.

Prof. Mahesh Goyani has published a research paper on “Robust Face Recognition Under Adversarial Attack Using SARGAN Model and Improved Cross Triple MobileNetV1” in Advances in Information and Communication, Lecture Notes in Networks and Systems (LNNS), Springer, Volume 1285, ISBN: 978-3-031-84460-7.

Prof. Mahesh Goyani has published a research paper on “*Hidden Adversarial Attack on Facial Biometrics – A Comprehensive Survey*” in the International Conference on Machine Learning and Data Engineering (Procedia Computer Science) (ISSN: 1877-0509), Volume 258, pp. 1383–1390, published in April 2025.

RESEARCH AND OUTREACH

Prof. Nilesh Maltare, Prof. Viral Patel, and Prof. Upendra Bhoi have published a research paper on “*An Outlier Detection Framework for Air Quality Index Prediction Using Linear and Ensemble Models*” in Decision Analytics Journal (ISSN: 2772-6622), Volume 14, pp. 1–13, published in March 2025.

Prof. Pinal Patel has published a research paper on “*Conceptual Study on Various ML Models Used in Financial Distress Prediction*” in the Conference on Revolutionizing Multidisciplinary Technical Education with Innovative Instructional Strategies: Vision 2047 for New Bharat, held in May 2025.

Prof. Pinal Patel has published a research paper on “*A Study on Packet Filtering and Network Traffic Management on Linux*” in Indian Journal for Technical Education (IJTE) (ISSN: 0971-3034), Volume 18, Issue 1, pp. 158–164, published in March 2025.

Prof. Safvan Vahora has delivered an expert talk on “*Deep Learning and Neural Networks*” on 5th March 2025 during a One-Week Faculty Development Program on “*Emerging Trends in Machine Learning*” organized by the Faculty of Computer Applications, Monark University, held from 3rd March 2025 to 8th March 2025.

Prof. Vimal Rathod has delivered an expert talk on “*Sailing the Sea of C*” during a Workshop on C Programming organized by the Technopreneur Club at Government Engineering College, Modasa.

Mechanical Engineering Department

Prof. Jeetendra Vadher has published a research paper on “Monitoring and Prediction of Boiler Refractory Failure by Remote Refractory Failure Detection and Temperature Pressure Monitoring System: An Artificial Intelligence-Based System Using Machine Learning” in SSRG International Journal of Mechanical Engineering (ISSN: 2348-8360), Volume 12, Issue 4, pp. 61–69.

Science and Humanities Department

Prof. M. A. Patel has published a research paper on “*(a, d)-Total Neighborhood Antimagic Labeling for Complete Graphs*” in The Bulletin of the Calcutta Mathematical Society (ISSN: 0008-0659), Volume 117, Issue 2, pp. 223–234.

PARTICIPATION

Electronics & Communication Department

Name	Training/Program	Organization	Duration
Prof. S. K. Rana	Yoga & Pos. Psych. for Career & Life	SWAYAM, NPTEL	17/02/2025 – 11/04/2025
Prof. N. D. Patel	Yoga & Pos. Psych. for Career & Life	SWAYAM, NPTEL	17/02/2025 – 11/04/2025
Prof. N. D. Patel	Edu. Tech & ICT	SWAYAM, NPTEL	20/01/2025 – 11/04/2025
Prof. K. R. Patel	RF & Antenna Design	AICTE ATAL FDP	27/01/2025 – 01/02/2025
Prof. M. S. Chauhan	Industrial Training	e-Infochip - An Arrow Co.	09/06/2025 – 27/06/2025
Prof. S. H. Mansuri	Industrial Training	Australian Premium Solar (India) Pvt Ltd	05/08/2024 – 17/08/2024
Prof. P. V. Patel	Industrial Training	Australian Premium Solar (India) Pvt Ltd	05/08/2024 – 17/08/2024
Prof. B. A. Brahmhatt	Industrial Training	Australian Premium Solar (India) Pvt Ltd	05/08/2024 – 17/08/2024
Prof. S. H. Mansuri	Edu. Tech & ICT	SWAYAM, NPTEL	20/01/2025 – 11/04/2025
Prof. P. V. Patel	Computer Networks & Internet Protocol	SWAYAM, NPTEL	20/01/2025 – 11/04/2025

Electrical Engineering Department

Name	Training/Program	Organization	Duration
Prof. K. K. Bhatt	Yoga & Pos. Psych. for Career & Life	SWAYAM, NPTEL	17/02/2025 – 11/04/2025
Prof. H. S. Pandya	Yoga & Pos. Psych. for Career & Life	SWAYAM, NPTEL	17/02/2025 – 11/04/2025

PARTICIPATION

Computer Engineering & Information Technology Department

Name	Training/Program	Organization	Duration
Prof. S. A. Vahora	ATAL FDP on Next Gen in AI/ML and IoT	V. V. P. Engineering College, Rajkot	06/01/2025 – 11/01/2025
Prof. P. S. Modi	ATAL FDP on Next Gen in AI/ML and IoT	V. V. P. Engineering College, Rajkot	06/01/2025 – 11/01/2025
Prof. U. R. Bhoi	Industrial Training	e-Infochips - An Arrow Company	09/06/2025 – 27/06/2025
Prof. N. N. Maltare	Industrial Training	e-Infochips - An Arrow Company	09/06/2025 – 27/06/2025
Prof. Viral R. Patel	Industrial Training	e-Infochips - An Arrow Company	09/06/2025 – 27/06/2025
Prof. Nilesh D. Goriya	Industrial Training	e-Infochips - An Arrow Company	09/06/2025 – 27/06/2025
Prof. Nainesh V. Nagekar	Industrial Training	e-Infochips - An Arrow Company	09/06/2025 – 27/06/2025
Prof. H. R. Patel	FDP on Leadership and Team Effectiveness	IIT Madras	20/01/2025 – 11/04/2025
Prof. H. R. Patel	FDP on Yoga and Positive Psychology	IIT Bombay	17/02/2025 – 11/04/2025
Prof. H. R. Patel	ATAL FDP on Next Gen in AI/ML and IoT	V. V. P. Engineering College, Rajkot	06/01/2025 – 11/01/2025
Prof. P. J. Patel	FDP on Computer Networks and Internet Protocols	NPTEL Swayam	20/01/2025 – 11/04/2025
Prof. P. J. Patel	Webinar on Science of Happiness	KCG, Education Department	19/02/2025
Prof. P. J. Patel	FDP on Introduction to Machine Learning	NPTEL Swayam	20/01/2025 – 11/04/2025
Prof. P. J. Patel	Webinar on LaTeX for Academics	KCG, Education Department	09/07/2025
Prof. P. J. Patel	Webinar on Psychology in Classroom	KCG, Education Department	25/04/2025
Prof. P. J. Patel	Webinar on Leadership Development	KCG, Education Department	08/04/2025
Prof. P. J. Patel	Webinar on Exam Roles	KCG, Education Department	21/03/2025

PARTICIPATION

Mechanical & Automobile Engineering Department

Name	Training/Program	Organization	Duration
Prof. P.M. Mistri	Educational Technology and ICT	SWAYAM NPTEL	20/01/2025 – 11/04/2025
Prof. P.M. Mistri	Non-Conventional Energy Resources	SWAYAM NPTEL	20/01/2025 – 11/04/2025
Prof. P.M. Mistri	Research & Incubation Excellence and NEP Insights	NITTTRB Ahmedabad	01/06/2025 – 06/06/2025
Prof. P.M. Mistri	Train the Trainer - EV & Hybrid Vehicle	iACE Ahmedabad	20/01/2025 – 24/01/2025
Prof. H.I. Chaudhari	Non-Conventional Energy Resources	SWAYAM NPTEL	20/01/2025 – 11/04/2025
Prof. M.G. Patel	Non-Conventional Energy Resources	SWAYAM NPTEL	20/01/2025 – 11/04/2025
Prof. J.C. Gamit	Educational Technology and ICT	SWAYAM NPTEL	20/01/2025 – 11/04/2025
Prof. J.C. Gamit	Non-Conventional Energy Resources	SWAYAM NPTEL	20/01/2025 – 11/04/2025
Prof. M.M. Madhikar	Educational Technology and ICT	SWAYAM NPTEL	20/01/2025 – 11/04/2025

Science and Humanities Department

Name	Training/Program	Organization	Duration
Prof. M. A. Patel	Transform Calculus and its applications in Differential Equations	SWAYAM NPTEL	20/01/2025

ACHIEVEMENTS

FACULTY ACHIEVEMENTS

Prof. M. M. Bhunga from Civil Engineering Department translated the AICTE book "*Engineering Geology*" into Gujarati (May 2024).



Prof. A. J. Patel from Applied Mechanics Department participated as BOS member at Silver Oak University for syllabus finalization on 11/04/2025.

Prof. M. M. Bhunga from Civil Engineering Department completed translation editing for NPTEL MOOC on *Dairy and Food Process and Product Technology* using Translingua on 17/06/2025.



Prof. Nirav D. Patel from Electronics and Communication Engineering Department was awarded Ph.D. from Ganpat University for research on *Spectral Efficiency in Massive MIMO* on 10/05/2025.



Notification No. 35/2025

Sub: - Declaration of the Result of Doctor of Philosophy

It is hereby notified for information of all concerned that consequent upon the reports of the examiners on the Ph.D. Thesis submitted by the under mentioned candidate, the Director General in exercise of the powers given to him under Regulation No. RP.26 of this University has accepted the thesis for the Degree of Doctor of Philosophy in the subject and Faculty shown against his/her name. The candidate is accordingly declared qualified to receive the degree of Doctor of Philosophy.

Sr. No.	Name of the Candidate / Regi. No.	Title of Thesis	Subject, Faculty & Deptt./College	Name of the Guide
1.	Patel Niravkumar Dineshbhai (18276351004)	INVESTIGATION OF SPECTRAL EFFICIENCY IN MASSIVE MIMO FOR VARIOUS DESIGN PARAMETERS AND FADING SCENARIOS	(i) Electronics and Communication Engineering (ii) Faculty of Engineering & Technology (iii) Ganpat University- U. V. Patel College of Engineering	Dr. Vijay K. Patel

*Viva-Voce held on 10/05/2025

F.No.57/GUNI/Ph.D/FOET/631/2025
Date: - 10/05/2025

Copy forwarded with Compliments to: -

1. Mr. Niravkumar Dineshbhai Patel, 21, Delolnagar Society, Modhara Road, Mehsana-384002. (M) 9904844121 E-mail: nirav2009ee@gmail.com
2. The Group Pro Chancellor and The Director General
3. The Pro Vice Chancellors
4. All Executive Deans /Deans / Principals / Heads
5. Sr. Director (Accreditation, Assessment & Ranking)
6. Director (Research & Development)
7. Controller of Examinations
8. Concerned Guide
9. Select File
10. Association of Indian Universities for University News, Thesis of Month Column,
11. A Soft Copy of Theses to INFLIBNET with Endorsement to UGC

(Dr. Girish N. Patel)
Executive Registrar



Prof. Priyank V. Patel from Electronics and Communication Engineering Department won District-Level Championship in Badminton Doubles at Khel Mahakumbh on 07/01/2025.

ACHIEVEMENTS



Prof. Hemang Pandya from Electrical Engineering Department secured a position in the top 1% nationally in the NPTEL MOOC course "*Yoga and Positive Psychology for Managing Career and Life*" conducted by IIT Bombay, scoring 90% (Feb–Apr 2025).



Prof. N. N. Maltare and **Prof. Safvan Vahora** from Information Technology Department, along with **Prof. P. V. Patel** from Electronics and Communication Engineering Department, and other contributors, published an Indian Patent titled "*Real-Time Road Safety System with Vehicle Detection, LORA Network, and IoT-Enabled Studs*". Patent Application No.: 202521009529.

Application Details	
APPLICATION NUMBER	202521009529
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	05/02/2025
APPLICANT NAME	1 . Government Engineering College, Modasa 2 . Sumeet Tokare 3 . Urvisha Delvadiya 4 . Darshana Panchal 5 . Kavy Metkeli 6 . Dhaval Vadher 7 . Dr. N. N. Maltare 8 . Dr. Safvan Vahora 9 . Prof. Priyank V. Patel
TITLE OF INVENTION	Real-Time Road Safety System with Vehicle Detection, LORA Network, and IoT-Enabled Studs
FIELD OF INVENTION	ELECTRONICS
E-MAIL (As Per Record)	shreedattalewconsultancy@gmail.com
ADDITIONAL-EMAIL (As Per Record)	chothan18preeti@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	06/02/2025
PUBLICATION DATE (U/S 11A)	28/03/2025
REPLY TO FER DATE	09/07/2025

Application Status	
APPLICATION STATUS	Reply Filed. Application in amended examination
View Documents	
<div> <div>→ Filed</div> <div>→ RQ Filed</div> <div>→ Published</div> <div>→ Under Examination</div> <div>→ Disposed</div> </div>	

Prof. P. J. Patel from Computer Engineering Department was honored as an NPTEL Discipline Star by IIT Madras under the National Programme on Technology Enhanced Learning (NPTEL) for the Jan–Apr 2025 session.

ACHIEVEMENTS

Prof. P. M. Mistri from Mechanical Engineering Department was honored as an NPTEL Discipline Star by IIT Madras under the National Programme on Technology Enhanced Learning (NPTEL) for the Jan-Apr 2025 session.



STUDENT ACHIEVEMENTS

Parbat Niteshkumar Santosh (Enrollment No.: 200160106020) from Civil Engineering Department was awarded for excellence in academic performance in B.E. Civil by GICEA at the 30th Gold Award Ceremony 2025 held on 08/02/2025.



Thakar Dakshesh Ratilal (Enrollment No.: 220160713018) from M.E. Civil – Transportation Engineering was recognized for excellence in academic performance in M.E. Transportation by GICEA at the 30th Gold Award Ceremony 2025 held on 08/02/2025.

ACHIEVEMENTS



Tinshuranjan Sanjaykumar Patel (Enrollment No.: 210160111001) from Electronics and Communication Engineering Department successfully cleared **GATE 2025** with an **All India Rank (AIR) of 9957** on **15/02/2025**.

"Science is a language that transcends boundaries; it is a universal tool for understanding the world."

Sir Chandrasekhara Venkata

"C. V." Raman

GRADUATE APTITUDE TEST IN ENGINEERING 2025 अभियंत्रिकी स्नातक अभिक्षमता परीक्षा २०२५ Organising Institute: INDIAN INSTITUTE OF TECHNOLOGY ROORKEE	
SCORE CARD	
Name of the Candidate	TINSHURANJAN SANJAYKUMAR PATEL
Name of the Parent/Guardian	SANJAYKUMAR PATEL
Registration No.	EC25S62007015
Date of Birth	October 22, 2003
Test Paper	Electronics and Communication Engineering (EC)
Date of Examination	February 15, 2025
GATE Score	354
Marks out of 100	25.33
All India Rank (AIR) in the test paper:	9957
Number of candidates appeared for the test paper:	81475
Qualifying Marks	
General:	25.0
EWS/OBC-NCL:	22.5
SC/ST/PwD:	16.6
 	
 A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category, for which a valid category certificate, if applicable, must be produced along with this Score Card.	
This Score Card is valid up to 31 st March 2028.	
GATE SCORE COMPUTATION	

Meghani Ansh Jitendrabhai from Computer Engineering Department secured **2nd Rank** in the **Codeverse** event at **Techfest: HackTheSpring25** organized by **GEC Gandhinagar**, winning a **₹6000** prize on **28/02/2025**.

The Future is Solar: Powering a Sustainable Tomorrow

Solar Energy – The Force Behind the Energy Revolution

The world is witnessing a fundamental shift in the way we generate and consume energy. Among all renewable sources, solar power stands out as the most abundant, scalable, and sustainable. The sun delivers more energy to Earth in one hour than humanity consumes in an entire year, a fact that underscores the immense potential waiting to be harnessed.

India, blessed with over 300 days of sunshine annually, is uniquely positioned to lead this transformation. From powering cities through large-scale solar farms to energizing rural communities with decentralized off-grid solutions, solar technology is reshaping our economic and environmental future. Innovations such as bifacial panels, floating solar farms, and advanced energy storage systems are accelerating adoption, making solar not just a clean alternative but the most economically viable energy option.

Australian Premium Solar (India) Ltd. – Engineering Excellence, Empowering India

At **Australian Premium Solar (India) Ltd.**, our vision has always been to bring world-class solar technology to every corner of the country. Established with the belief that quality should never be compromised, APS manufactures high-performance solar panels designed to endure Indian climatic conditions while delivering maximum efficiency.

Today, we proudly manufacture **TOPCon (Tunnel Oxide Passivated Contact) solar panels** — a next-generation technology known for its **higher efficiency, improved temperature performance, and better durability** compared to conventional modules. This is in addition to our existing product range, which includes:

Our product portfolio includes:

- **Monocrystalline s Half-Cut Solar Modules** for superior output.
- **High-efficiency Bifacial Panels** that capture sunlight from both sides.
- **Advanced Grid-Tied and Hybrid Inverters** for optimal performance.
- **Solar Water Pumps** that support sustainable agriculture.

With a production capacity of 1.2GW almost, in-house RCD, and a pan-India presence, APS has become a trusted name for residential, commercial, and industrial solar solutions. Beyond business, we are committed to sustainability, allocating 2% of our profits for community well-being and actively contributing to India's clean energy mission.

TRENDING TECH TALKS

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The solar sector isn't just about technology; it's about people. By 2030, India's solar industry is expected to generate millions of jobs in manufacturing, project execution, engineering, RCD, and maintenance.

For young graduates, the field offers a unique blend of **purpose and opportunity**—a chance to work at the intersection of innovation, sustainability, and economic growth. As the industry embraces AI-driven monitoring, IoT-enabled energy management, and smart grid systems, professionals with technical expertise, problem-solving skills, and adaptability will thrive.

Looking Ahead

The future of energy is undeniably solar. With supportive policies, rapid innovation, and increasing adoption, solar will soon dominate India's energy mix. For our nation, it's more than an energy source—it's a pathway to self-reliance, economic resilience, and environmental stewardship.

As an engineer and entrepreneur, I believe we are living through a defining moment in history—one where we can leave a cleaner, brighter legacy for generations to come. The sun has always shone on us; now, it's our turn to harness it to its fullest potential.



Mr. Nikunj Patel

Founder & CEO

Australian Premium Solar (India) Ltd.

Alumni, GEC Modasa (Mechanical, Batch 2004)

GECM E-News

Newsletter | January – June 2025

Government Engineering College, Modasa.

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