

2nd Issue

NEWS LETTER

"Forging the Future
with Precision and
Passion"

JANUARY–JUNE 2025

MECHANICAL ENGINEERING DEPARTMENT



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ABOUT

GEC GANDHINAGAR

SECTOR 28

The Government Engineering College, Gandhinagar (GECG), was established in 2004 to provide higher education in engineering and technology. The institute is recognized by the All India Council for Technical Education (AICTE), New Delhi, and the Institution of Engineers (India). The college is administered by the Directorate of Technical Education, Gujarat State, Gandhinagar, and is affiliated with Gujarat Technological University (GTU).

All the courses at this college are taught according to the syllabus and examination system of GTU

In November 2007, the college moved to its new campus at Sector-28, near GEB, which was inaugurated by Smt. Anandiben Patel, then Minister for Higher and Technical Education. The campus is spread over 33 acres (130,000 m²) of land.

PRINCIPAL'S MESSAGE



Dr. Sweta Dave
PRINCIPAL, GECG

Dear Faculty, Staff & Students,

To those who see with loving eyes, life is beautiful. To those who speak with tender voices, life is peaceful. To those who help with gentle hands, life is full. And to those who care with compassionate hearts, life is good beyond all measure!" With a compassionate heart, I invite you to take an initial peek at our organization's vision and values. The Government Engineering College, Gandhinagar (GECG) primarily exists to nurture the untapped potential hidden within young talent. We aim to provide a platform for students to express their creativity and channel their knowledge and youthful, inspirational energy.

At GEC Gandhinagar, the joyful experience of academics combines with the vibrant energy of co-curricular activities to create a holistic and enriching journey for our students and attendees. Our highly qualified faculty and dedicated management ensure that our students are equipped to meet the challenges of the outside world.

GEC Gandhinagar fosters both a strong academic foundation and a practical, market-oriented approach, enabling our students to become knowledgeable and industry-ready. We firmly believe in this vision. Our faculty members are well-qualified and trained to deliver knowledge in an engaging and interactive manner, rather than simply encouraging rote learning.

Finally, I want to emphasize that we focus on the overall development of our students. We also take care of our staff and college resources to provide students with the highest quality of academic value.

I heartily welcome you to join our prestigious institution and become part of our GECG family.

Dr. Sweta Dave
Principal, GECG

ABOUT MECHANICAL DEPARTMENT



With reference to the letter from the education department (શિ.વિ. ગાંધીનગર ના પત્ર ક્રમાંક: ૫૨૫/૧૦૨૦૨૨/૩૧૨/સ, તા. ૨૦/૦૪/૨૦૨૨) and the Directorate of Technical Education (વડી કચેરી, ગાંધીનગર ના શેરા ક્રમાંક: ડીટીઈ/એકેડેમિક/ક(૪)/કોવિડ-૧૯/૨૦૨૧/૩૨૯૧, તા. ૨૦/૦૪/૨૦૨૨), the Mechanical Engineering Department was established at Government Engineering College, Sector-28, Gandhinagar, with an intake capacity of 60 students, starting from the academic year 2022–23.

Mechanical Engineering encompasses a wide range of areas, including Energy, Fluid Mechanics, Dynamics, Combustion, Vibration, Design, Manufacturing processes, Systems Modeling and Simulation, Mechatronics, Robotics, Mechanics of Materials, Rapid Prototyping and Composites.

It deals with all aspects of the conversion of thermal energy into useful work and the machines that make this possible. Mechanical Engineering is often referred to as the ‘MOTHER’ of all engineering branches due to its foundational importance in the field of engineering.

DRAFT VISION AND MISSION

- **VISION**

Produce globally competitive, innovative mechanical engineers with core values for the benefit of society and environment.

- **MISSION**

1. To prepare competent mechanical engineers who can imbibe core values.
2. To deliver information about current trends and innovations in the field of mechanical engineering to the students.
3. To encourage creative thinking at all levels in order to meet the technological and economic needs of the environment and society.

***This is the draft vision and mission of Mechanical Engineering as the branch has been started AY 2022-23.**

Mechanical Engineering Faculties



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Mr. J. A. Mistri
Instructor

Faculties Achievements and Publications

- **Dr. Rupal P Vyasa**



Dr. Rupal. P. Vyasa successfully completed Doctoral degree from Gujarat Technological University in May 2025.

- **Dr. N. A. Patel**



Dr. N. A. Patel delivered expert lecture during the Summer Science Camp 2025, organized from 29th April to 3rd May 2025 at the Regional Science Center, Patan, under the aegis of GUJCOST – DST, Government of Gujarat. His session was conducted on 2nd May 2025 from 11:00 AM onwards, focusing on the topic “Robotics and AI in Modern Agriculture.”

- **Dr. Kalpeshkumar P Patel**



1. Prof. K P Patel participated in NPTEL Online course ‘Philosophy and Critical Thinking’ during July-April 2025 and secured 73% Score.
2. Prof. K.P.Patel successfully completed Doctoral degree from Kadi sarva vishvavidhlaya in March 2025.
3. Prof. K.P.Patel’s paper titled ‘Analysis, evaluation and selection of nanoparticles added in paraffin using the MADM-TOPSIS approach’ has been published in the ‘Interactionsjournal’ in March 2025.

Faculties Achievements and Publications



4. Prof. K.P.Patel's paper titled 'Taguchi's technique for optimizing FSPCM parameters for drying application' has been published in the 'IJDE journal' in May 2025.
5. Prof. K P Patel attended an STTP on 'Emerging Trends & Practices In Optimization And Sustainable Technology' during 02/06/2025 to 13/06/2025 at Gujarat Extension Centre, NITTTRB, Ahmedabad.
6. Prof. K P Patel visited 'Space Application Centre Ahmedabad' under GKS on 02-05-2025

• Prof. R.H. Patel



Prof. R.H.Patel reviewed paper the manuscript entitled "Validation and correction of photoelastic techniques for frictional granular systems" for Measurement Science and Technology Journal.

• Dr. Dinesh Mevada



Dr. Dinesh Mevada have achieved a google scholar citations of more than 1000 having h index of 14 and i-10 index of 14



Student's Achievements



Mahemdavadia Viral
(230130119023)



Parth Prajapati
(230130119047)

Student's Achievements



Harsh Majethia
(230130119017)



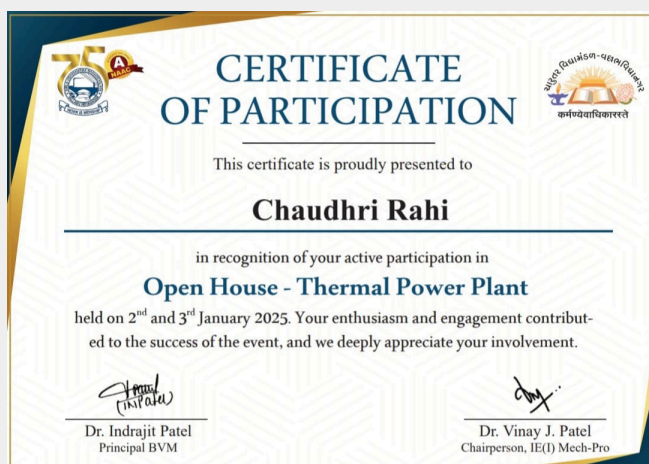
Swati Kmari
(230130119057)

Student's Achievements



Hetarth Patel
(230130119037)

Rikin Pithadia
(230130119042)



Rahi Chaudhari
(230130119005)

CERTIFICATE OF PARTICIPATION

This certificate is presented to:

KRISHAN PATEL

For participating in the session organized by **ENVISION** on the topic **Understanding Product Design and Its Process.**

The session focused on enhancing understanding of the complete product design process and the essential technical skills required for mechanical designers in industrial applications.

We appreciate your engagement and commitment to professional development in the field of mechanical design.

DATE 11/05/2025

SIGNATURE



Krishan Patel
(230130119039)



Pledge on **FIRE SAFETY**
at Healthcare Facilities

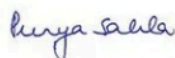
This is to certify that
Bhavy Alkesbhai patel

has taken the Pledge on Fire Safety at Healthcare Facility to support Fire Safety Week, 21st-26th April 2025 and has committed to promote Fire Safety at Healthcare Facilities.

9922766843

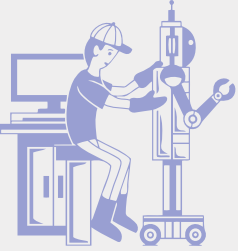


May, 11 2025



Ms. Punya Salila Srivastava.
Secretary (H&FW),
Ministry of Health and Family Welfare,
Government of India

Bhavy Patel
(230130119036)



New Purchased Instruments



Heat Exchanger



Lathe Machine

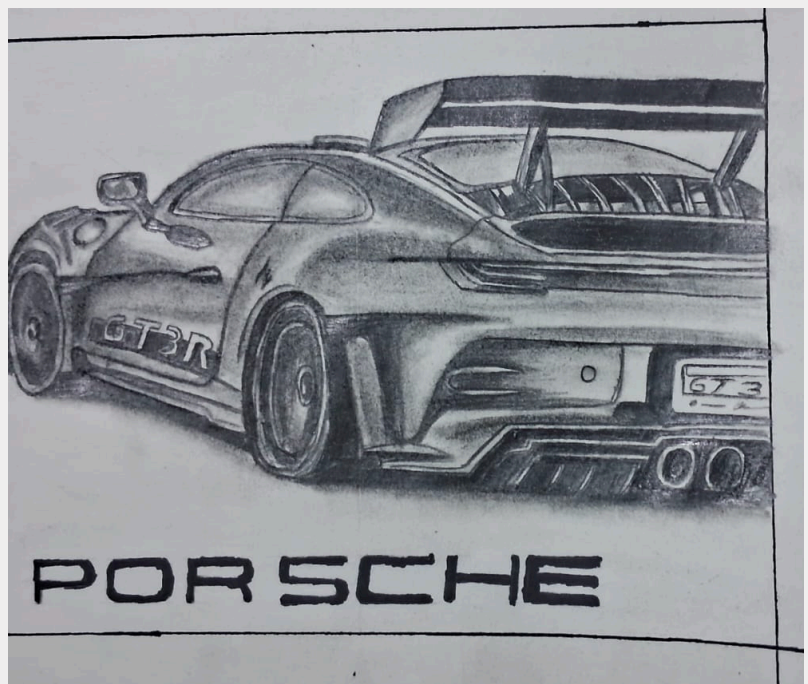


Surface Grinder



***CNC Lathe
Machine***

Student's Creativity



Departmental Activities

1. Dr. V.D.Patel, Asst. Prof., Mechanical Engg. Dept., GEC Palanpur delivered an online expert session to the students of 4th and 6th semester, Mechanical and Metallurgy Department, GEC, Gandhinagar on “Non Dimensional numbers the mystery of fluid mechanics)” on 07th March 2025 coordinated by Dr. K.P.Patel and Dr. H.H.Jadav. Total of 42 participants are benefited by this programme.



Departmental Activities

2. Prof. R.H.Patel and Prof. R.C.Ghanghas coordinated a Expert Talk on “Strengthening Mechanism for Metals”. on date 6/3/2025. There are 73 students are participated in the event. Students of mechanical and metallurgy department have taken advantage of the event.



Departmental Activities

3. Prof. Vinod N. Patni and Dr.D.G Sharma coordinated a Expert Talk on “Nano Material and Composite” on date 11/03/2025. There are 67 students are participated in the event. Students of mechanical and metallurgy department have taken advantage of the event.



Educational visit

Students of 6th semester Mechanical department GEC Gandhinagar had recently visited Pandit Deendayal Energy University, Gandhinagar on date 18/03/2025 related to workshop on “Exploring the Future of Manufacturing: Live Demonstration with o mentor Dr. Dixit Patel



Media coverage

સરકારી ઇજનેરી કોલેજ દ્વારા વર્કશોપનું આયોજન



સરકારી ઇજનેરી કોલેજ, સેક્ટર-૨૮ મિકેનિકલ ઇજનેરી વિભાગ દ્વારા વર્કશોપનું આયોજન કરાયું હતું. ઇન્ડસ્ટ્રીઝ ૪.૦ : ધ નેક્સ્ટ જનરેશન ઓફ મિકેનિકલ ડિઝાઇન વિષય પર વર્કશોપ યોજાયો હતો. જેમાં બીજા વર્ષના ૩૫ જેટલા વિદ્યાર્થીઓએ ભાગ લીધો હતો. વર્કશોપમાં તજજ્ઞ દ્વારા ઔદ્યોગિક ક્ષેત્રે ભવિષ્યમાં આવનારા મિકેનિકલ આધારિત ડિઝાઇન સોફ્ટવેર અને તેને લગતા વિષય પર માહિતી આપી હતી અને સાથે સાથે વિદ્યાર્થીઓને પ્રેક્ટિકલી પણ જીખવાડવામાં આવ્યું હતું. આ સમય વર્કશોપનું આયોજન ડો. દિનેશ મેવાડા અને પ્રો. સંજય માળી દ્વારા મિકેનિકલ વિભાગના વડા ડો. આર્. બી. દલેના માર્ગદર્શન હેઠળ કરવામાં આવ્યું હતું.

Industries 4.0 : THE NEXT GENERATION OF MECHANICAL DESIGN

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