

Department of Mechanical Engineering Government Engineering College - Dahod

News letter (July 2021 to December-2021)

Affiliated to Gujarat Technological University (GTU)
Dept. of Higher and Technical Education, Gujarat State



Address: Jhalod Road, Dahod-389151 (Gujarat) Phone: (02673) 263780
E-mail: gec-dahod-dte@gujarat.gov.in Website: www.gecdh.cteguj.in

FROM THE DESK OF THE HOD

Its overwhelming to witness Mechanical Department of the Government Engineering College Dahod releasing its Ninth Issue of the Newsletter. The articles and achievements of the faculty and students of the college is commendable. A committed team of professors and enthusiastic students of the department have made the academic year 2021 memorable by having a bunch of professional activities and progress. 2022 brings its own set of challenges and opportunities. The possibility of Omicron wave hitting the nation is a serious issue and as an institute we will make sure we are well equipped to tackle the possible challenges of the possible third wave without compromising the professional and academic activities for the welfare of the students. I hope that the list of events catalysis the success in the coming years.

Advisors

Dr. P.K. Brahmabhatt (Principal)
Dr. D.R. Shah (HOD Mechanical)
Prof. M.Y. Patil
Prof. R.I. Patel

Editorial Team

Dr. D.B. Jani
Dr. N.S. Mehta
Mr. Prajit Kaboo (180180119016)
Ms. Shetty Bhavya (190180119063)

BOOK POST

To,

Dr. D. R. Shah
H.O.D. Mechanical Engineering
Department
(January-2022)



Institute Vision

To be a value based engineering institute to disseminate globally acceptable education and to nurture research, innovation and entrepreneurship.

Institute Mission

1. To provide quality education in engineering disciplines through creative balance of academic and extra-curricular activities.
2. To provide learning environment for innovation and entrepreneurship.
3. To disseminate ethical values, social values and sensitivity towards environmental issues.

Department Vision

The Mechanical Engineering Department endeavors to be recognized for quality education and research, leading to well qualified innovative mechanical engineers having essential technical, managerial and entrepreneurial skills.

Department Mission

1. Developing essential technical and managerial skills of the students by imparting fundamental knowledge of engineering and its practical applications through qualified, trained and experienced faculties.
2. To enhance the creative and innovative skills of the students by providing state-of-the-art infrastructure and teaching-learning environment and encouraging them for development activities and higher education through research.
3. To provide a collaborative environment establishing links with industries that stimulate faculty and students with opportunities to create, analyze, apply and disseminate knowledge.
4. To encourage the students for life-long learning, ethical values and entrepreneurial culture for industrial and societal needs.

Program Educational Objectives (PEOs)

PEO-01: Apply knowledge of science, mathematics, technology, engineering, management, humanities and various other interdisciplinary subjects to identify and address the technical and societal problems.

PEO-02: Enhance their intellectual and analytical abilities in taking initiatives and/or develop innovative ideas for technological and professional growth as a technocrat / an entrepreneur in mechanical and allied disciplines.

PEO-03: Work effectively as a team member or lead multidisciplinary teams while demonstrating the interpersonal & management skills and ethical responsibilities.

Training taken by the faculty

| Sr. No. | Name of Faculty | Training taken | Duration |
|---------|--|--|------------------------------|
| 1 | Prof. Y. B. Chauhan | one week STTP(online) on "Innovative Teaching Methods" organized by NITTTR- Bhopal | 05/07/21 to 09/07/21 |
| 2 | Prof. B. N. Gelot | one week STTP(online) on "Innovative Teaching Methods" organized by NITTTR- Bhopal | 05/07/21 to 09/07/21 |
| 3 | Dr. P.K.Brahmbhatt | one week STTP(online) on "Innovative Teaching Techniques for Mechanical Engineering" organized by NITTTR- Bhopal | 12/07/21 to 16/07/21 |
| 4 | Prof. N. R. Sheth | one week STTP(online) on "Innovative Teaching Techniques for Mechanical Engineering" organized by NITTTR- Bhopal | 12/07/21 to 16/07/21 |
| 5 | Prof. B. K. Chavda | One week on line FDP on Metallurgical Testing & Failure analysis of metals. | 13-9-2021 to 17-9-2021 |
| 6 | Prof. B. K. Chavda | Six day virtual FDP on " ME8594 Dynamics of Machine". | 26-7-2021 to 31-7-2021 |
| 7 | Prof. N. H. Prajapati | NPTEL4 week online courses on "Our Mathematical Senses Part 1: Geometry of Vision" | 4 week course (Aug-Sep 2021) |
| 8 | Prof. N. H. Prajapati | NPTEL8 week online courses on "Mechanics and Control of Robotics Manipulators". | 8 week course (Aug-Oct 2021) |
| 9 | Prof. M.Y.Patil Dr. N.S.Mehta Prof. Y.B. Chauhan Prof. N.R. Sheth Prof. K.K. Bhabhor | A One Week Online Faculty Development Programme (FDP) on “Current Field Practices for Energy and Utility Systems” Sponsored by AICTE Training and Learning (ATAL) Academy, AICTE, New Delhi, organized by Mechanical Engineering Department, GEC, Dahod. | 6-12-2021 to 10-12-2021 |
| 10 | Dr. D.B. Jani | “Pedagogy and effective use of ICT in engineering and higher education” organized by NITTTR, Bhopal. | 09-08-2021 to 13-08-2021 |

Achievements and activities of the department

- ❖ A webinar on "Information about NBA (National Board of Accreditation) is given to students of GEC, Dahod by Prof. N S Mehta on 17-07-2021.
- ❖ ISHRAE Chapter Dahod meeting organized among 20 members of ISHRAE with Prof. D. B. Jani, Prof. N. S. Mehta and Prof. P. M. Gautam on 26-7-2021.
- ❖ Mr. Sondagar Krunal Mahendrakumar (190180119068) Conducted seminar on Personal Finance on 3-7-2021 and 12-8-2021.
- ❖ The webinar is organized on topic of "Steam Turbine and Steam Technology-Overview" by Shri Dinanath Akela, Manager Operations, Combined Cycle Power Plant Reliance Industries Ltd, Haziraby Mechanical Engineering Department, GEC Dahod on 04-09-2021.
- ❖ "Teachers day" was celebrated by Mechanical Engineering, GEC, Dahod on 04-09-2021.
- ❖ Mr. Kalyan Pandey (190180119037) student of Mechanical Engineering of G.E.C., Dahod stood on 3rd position in singing in the event Zaverchand Meghani Spardha conducted by GEC, Dahod on 03-09-2021.
- ❖ Mr. Kalyan Pandey (190180119037) student of Mechanical Engineering of G.E.C., Dahod stood on 1st position in the event of "National Shayar Shri Zaverchand Meghani 125th Birth Anniversary Singing Competition" organized by Gujarat Technological University, Ahmedabad on 17-09-2021.
- ❖ Mr. Kalyan Pandey (190180119037) student of Mechanical Engineering of G.E.C., Dahod stood on 3rd position "Aazadi ka Amrut Mahotsav" organized by Knowledge Consortium of Gujarat, Department of Education, Government of Gujarat during 28-09-2021 to 01-10-2021.
- ❖ Mr. Sondagar Krunal Mahendrakumar (190180119068) discussed live on youtube <https://youtu.be/73L5F1NrW0Q> on topic "Mutual funds क्यों है जरूरी?" on 21 - 12 - 2021.
- ❖ Dr. D.B. Jani, Associate professor in mechanical engineering department published book entitled "Renewable Energy Systems", Copyright © 2021 Elsevier Inc. ISBN 978-0-12-820004-9.
- ❖ Mr. Prajit Kaboo student of 7th semester B.E. Mechanical is awarded certificate of appreciation for valuable contribution to the occasion of "GYAN SHAKTI DIWAS" held on 1st August, 2021.



Research publications by the faculty& Students

| Sr. No. | Name of Faculty | Publication title | Journal/Book |
|---------|-------------------------|--|--|
| 1 | Prof. Kiran K. Bhabhor. | Performance analysis of desiccant dehumidifier with different channel geometry using CFD. | Journal of Building Engineering, Elsevier, Volume 44, October 2021 |
| 2 | Prof. N. S. Mehta | Extraction of algae biodiesel from algae used as fuel for power generation and transportation. | “Abhiyanta Bandhu” magazine published by Indore local center, The Institution Engineers (India) |
| 3 | Dr. D.B. Jani | Experimental Investigation of Friction stir Welding Using Hybrid Alloys. | International Journal of Advanced Research in Science, Communication and Technology, Vol. 6(1), 352-360. Date: 13-06-2021. |
| 4 | Dr. D.B. Jani | TRNSYS simulation of desiccant integrated hybrid cooling and dehumidification system. | Petroleum and Chemical Industry International, Vol. 4(3), 63-66. Date: 20-11-21. |
| 5 | Dr. D.B. Jani | Experimental investigation of solid desiccant wheel in hot and humid weather of India. | International Journal of Ambient Energy, https://doi.org/10.1080/01430750.2021.1999326 Date: 23-11-2021. |



Achievements and activities of the department



Dr. V.K. Vijay, IIT Delhi, Chief Guest



દાહોદમાં પાંચ દિવસીય ફેકલ્ટી ડેવલપમેન્ટ પ્રોગ્રામ સંપન્ન

દાહોદ. દાહોદની સરકારી ઈજનેરી કોલેજના મિકેનિકલ વિભાગ દ્વારા વિદ્યાર્થીઓના વિકાસ સાથે પ્રોફેસરના જ્ઞાનમાં વધારો થાય તે હેતુથી કરંટે ફિલ્ડ પ્રેક્ટીસીસ ફોર એનર્જી એન્ડ યુટિલીટી સિસ્ટમ વિષય ઉપર પાંચ દિવસીય ફેકલ્ટી ડેવલપમેન્ટ પ્રોગ્રામ ગત અઠવાડિયે યોજાયો હતો. જેમાં ભારતની નામાંકિત ટેકનોલોજીકલ સંસ્થાઓ, ઉદ્યોગો તેમજ સંશોધક સંસ્થાઓના વિષય નિષ્ણાંતો તથા વિદેશના રિસર્ચર દ્વારા હાલ એનર્જી પ્રોડક્શન તથા યુટિલીટી સંબંધિત સિસ્ટમોમાં પ્રવર્તમાન પદ્ધતિઓ તથા થઈ રહેલા સંશોધનો વિશેની જાણકારી ઓનલાઈન મોડ પર આપવામાં આવી હતી. આ ફેકલ્ટી ડેવલપમેન્ટ પ્રોગ્રામનું આયોજન પ્રો. ડી.આર.શાહ તેમજ પ્રો. પી.કે.બ્રહ્મભટ્ટના માર્ગદર્શનમાં કરાયું હતું. આ કાર્યક્રમમાં આઈઆઈટી દિલ્હીના પ્રો. વિરેન્દ્ર વિજય મુખ્ય અતિથી તરીકે ઉપસ્થિત રહ્યાં હતા. આ કાર્યક્રમમાં મોટી સંખ્યામાં અધ્યાપકો, સંશોધકોએ ભાગ લીધો હતો.



- ❖ Department of Mechanical Engineering, Government Engineering College Dahod organized One Week Online Faculty Development Programme (FDP) on “Current Field Practices for Energy and Utility Systems” (Sponsored by AICTE Training and Learning (ATAL) Academy, (AICTE), New Delhi) 6-10 December, 2021.
- ❖ NSS Cell, GEC Dahod has organized a Painting and Poster making competition on 2nd October under "Azadi ka Amrit Mahotsav." Students of Mechanical Engineering, GEC, Dahod also participated in the competition.
- ❖ NBA Mock visited on 20 & 21-10-2021. Prof. U V Shah, Professor Mechanical, GEC Modasa, Prof. Anand Dhruv, Professor Mechanical, GEC, Patan, Prof. Ketan Badgujar, Professor, Electrical, SSEC, Bhavnagar and Prof. Parin Shah, Professor, Chemical, LDCE, Ahmedabad were present during NBA Mock visit.

GTU Result Corner

GTU Result of Government Engineering College, Dahod of May, 2021 Examination

| Semester | Total Students appeared | Total Pass Students | Total Failed Students | Percentage of Pass Students |
|----------|-------------------------|---------------------|-----------------------|-----------------------------|
| 8 | 438 | 434 | 06 | 99.08 |
| 6 | 450 | 428 | 55 | 95.11 |
| 4 | 493 | 432 | 61 | 87.6 |
| 2 | 99 | 91 | 08 | 92.0 |

GTU Result of Mechanical Engineering Department of May, 2021 Examination

| Semester | Total Students appeared | Total Pass Students | Total Failed Students | Percentage of Pass Students |
|----------|-------------------------|---------------------|-----------------------|-----------------------------|
| 8 | 122 | 121 | 1 | 99.18 |
| 6 | 108 | 103 | 05 | 95.37 |
| 4 | 132 | 120 | 12 | 90.91 |
| 2 | 11 | 10 | 01 | 90.91 |

Top 3 students CPI wise of Mechanical Engineering Department GTU Result May, 2021 Examination

| Sr. No | Semester | Enrolment No | Name of Student | CPI | CGPA | SPI |
|--------|----------|--------------|---------------------------------|------|------|-------|
| 1 | 8 | 180183119006 | DADI JIYAULHAK BASIRAHMAD | 8.91 | 9.20 | 10.00 |
| 2 | 8 | 170180119062 | ATEL KAUSHIKKUMAR ASHOKBHAI | 8.18 | 8.82 | 9.64 |
| 3 | 8 | 180183119026 | SHAH JEEL SANDIPKUMAR | 8.16 | 8.55 | 9.84 |
| 1 | 6 | 180180119013 | GUPTA RAVISHANKAR RADHESHYAM | 7.74 | 8.09 | 8.30 |
| 2 | 6 | 180180119065 | PRAJAPATI DEEPAKUMAR RAJESHBHAI | 7.45 | 8.67 | 8.61 |
| 3 | 6 | 180180119105 | YADAV KULDEEP PURAN | 7.45 | 8.41 | 8.61 |
| 1 | 4 | 200180119510 | TIWARI DHANANJAY BHUPENDRABHAI | 8.57 | 0.00 | 8.48 |
| 2 | 4 | 200180119535 | ANUJ DEVENDRA MISHRA | 8.28 | 0.00 | 8.65 |
| 3 | 4 | 190180119063 | SHETTY BHAVYA KRISHNA | 8.11 | 0.00 | 8.30 |
| 1 | 2 | 200180119001 | PANKAJ KUSHWAHA | 8.67 | 0.00 | 8.59 |
| 2 | 2 | 200180119005 | PARMAR SHUBHAM SANTOSH | 8.26 | 0.00 | 8.68 |
| 3 | 2 | 200180119008 | PATHAK HIMANSHU DHIREN | 8.15 | 0.00 | 8.00 |

Placement of students

| Sr. No. | Enrolment no | Name of Students | Company Detail |
|---------|------------------------------|------------------|---|
| 1 | Nayaka Samir Rajesh | 160180119041 | PETForm Technologies Pvt. Ltd |
| 2 | Khatri Mihir Harishkumar | 170180119031 | Cryogas Equipment Pvt. Ltd |
| 3 | Singh Aditya Santoshkumar | 170180119099 | NATS: Board Of Apprenticeship Training/ Board Of Practical Training |
| 4 | Singh Nikhil | 170180119103 | Tema India Ltd. Mumbai |
| 5 | Saroj Rahul R | 170180119093 | Weavetech Engineers Ltd. Surat |
| 6 | Ashishkumar R Shah | 170180119095 | Collabera Technologies Pvt. Ltd. Vadodara |
| 7 | Mahavar Yatindra B. | 180183119011 | Council Of Scientific And Industrial Research, Bengaluru |
| 8 | Panchal Akshaykumar | 170180119047 | Nobel Automotive India Pvt. Ltd. |
| 9 | Abhimanyu Rai | 170180119084 | Collabera Technologies Ltd. Vadodara |
| 10 | Vaibhav Lad | 170180119036 | Investa Pumps Pvt. Ltd., Gundlav (Valsad) |
| 11 | Aniket Pawar | 170180119080 | Shilchar Technologies Ltd. Vadodara |
| 12 | Shaikh Moh Vajid Z. | 170180119096 | Ratnam Energy Pvt. Ltd. |
| 13 | Rahul Tripathi | 170180119118 | Weave tech Pvt. Ltd. Surat |
| 14 | Shivam D. Yadav | 180183119031 | CSIR National Aerospace Laboratories, Bengaluru |