# Department of Mechanical Engineering Government Engineering College - Dahod

# News letter

(July 2020 to December-2020)

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



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#### <u>Advisors</u>

Dr. P.K. Brahmbhatt (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

#### FROM THE DESK OF THE HOD

It gives me great pleasure to give my best wishes to a newsletter (July-2020 to December-2020) from Department of Mechanical Engineering of GEC, Dahod. Most of the faculties have excellent track records and are associated with leading institutes like IITs, NITs & other reputed institutions. The faculty takes active interest in research and development activities. High Impact publications in International Journals and authoring refereed books showcase the standard of the faculty members. The students and faculties of department are always enthusiastic in taking initiatives in technical, cultural and social events. I hope that this edition of the newsletter will serve the purpose of reflecting all activities of department and it will inspire others to do their best.

<b>BOOK POST</b>					
To,					



Dr. D. R. Shah H.O.D. Mechanical Engineering Department (January-2021)

#### **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.

#### **DepartmentMission**

- 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	N S MEHTA	Participated in webinar "W2 – Evolving and aligning teaching process for implementing engineering curriculum" organized by National Institute of Technical Teachers' Training and Research, Bhopal.	09-07-2020
2	N S MEHTA	Participated in webinar "W10 – Applying for accreditation" organized by National Institute of Technical Teachers' Training and Research, Bhopal.	20-08-2020
3	ALL TEACHING STAFF MEMBERS	Successfully completed online UDAYAM (Unlimited Digital Advanced Yearlong Academic Method of Learning) E-Content Development Course jointly organized by Knowledge Consortium of Gujarat, Ahmedabad and HRDC, Gujarat University.	28-07-20 to 18-08-2020
4	ALL TEACHING STAFF MEMBERS	Successfully completed certificate course on "Comprehensive online intellectual property rights (IPR)" conducted through online i-Hub (A Gujarat Government Enterprise).	06-07-20 to 14-9-2020
5	K K BHATT	Participated in the ONE WEEK ONLINE FACULTY DEVELOPMENT PROGRAM on "Advanced Materials (Fabrication, Characterization and Applications)" by Kalinga Institute of Industrial Technology (KIIT), Odisha (PAID TRAINING)	20-07-20 to 25-07-2020
6	J M PATEL	Participated in Quiz "Atmanirbhar bharat-Swatantra Bharat"	31-07-2020
7	M Y PATIL	Three-Day Workshop on NBA Accreditation Process by B K Birla Institute of Engineering & Technology, Pilani.	29/8/2020 to 31/8/2020
8	M Y PATIL	Webinar on "Planning Required during the visit and Post visit activities" by NITTTR Bhopal	25/8/2020
9	J M PATEL	Successfully completed online MOOC, on Topic "Accreditation for Undergraduate Engineering Programmes" conducted by NITTTR, Bhopal.	27-01-20 to 20-04-2020
10	N R SHETH	Participated in One day webinar on "Thermal power Plant-Operations and Maintenance-An Overview"	26-07-2020
11	D B JANI	"Green Technology and Sustainable Engineering" by ADIT, V.V. Nagar under AICTE ATAL Academy	21-09-20 to 25-09-2020
12	ALL TEACHING STAFF MEMBERS	In house training for 3 Days FDP on ANSYS Mechanical and Fluent by ARK Infosolutions Pvt. Ltd, Pune at GEC, Dahod	6/7/2020 to 8/7/2020

### Achievements and activities of the department

- ❖ Under the guidance of Prof. N S Mehta, GEC Dahod, Prof. K K Mehta, VPMP, Gandhinagar (Registration No 149997119011) has successfully completed Ph.D. on "Experimental Investigation Oscillating Heat Pipe" from Gujarat Technological University, Ahmedabad on 03-12-2020.
- ❖ Prof. M K Chudasma won the best paper award for his paper titled "Challenges in joining of metallic pipes using microwave hybrid heating" at International Conference (ICRADM-2020) during 16 to 17-07-2020 at SVNIT-Surat.
- ❖ Mechanical Department had arranged an expert lecture on "Vibration analysis" was conducted by Anup Goel on 8-10-2020.
- ❖ Mechanical Department had arranged an expert lecture on "Vibrations, Condition monitoring" was conducted by Dharmen Tailor on 22-10-2020
- Mechanical Department had arranged an expert lecture on "Workshop on Finite Element Analysis Using ANSYS" was conducted by Mr. T. Varak Senior, CAE Expert at CADCAMGURU, Pune on 6-11-2020
- ❖ Prof. M K Chudasma Served as Reviewer and session chair for International Conference (RAM-2020) at SVNIT-Suratduring 03 to 05-07-2020.
- ❖ A design patent "Assisting Device to stand and walk" is successfully registered by students Vaghasiya Parthkumar, Rahul Nayak, Ravikumar Jangid and Bhavin Patel of Mechanical Engineering of GEC Dahod.
- Research article entitled "Analysis of front axle for TATA LPT 1109EX36 by analytical and FEA method" published by Dr. D.B. Jani, Prof. K.K. Bhabhor and Mr. Taushif Pathan (P.G. Scholar) was awarded the best paper by International Journal for Advance Research in Science, Communication and Technology Vol. 2(3), 2020.
- ❖ Dr. D.B. Jani, Associate professor delivered expert talk on "Desiccant cooling" at V.V.J. institute of engineering and technology at Hyderabad on July 30, 2020.
- ❖ The research article on "An overview on use of different natural refrigerants used in refrigeration" published by Dr. D.B. Jani, Associate professor is awarded the best research article during Doctoral Research Colloquium 2020 held at Chennai on 28-06-2020.
- A research paper "Performance prediction of desiccant assisted dehumidification and cooling system using ANN" is awarded the Best Paper in IETE Sponsored third National Conference on Emerging Trends in Engineering, Science and Technology (ETEST-2020) organized by RNS Institute of Technology, Bengaluru by Dr. D.B. Jani, Associate professor on June 17, 2020.
- ❖ Dr. D.B. Jani, Associate professor received the Award for the Best Researcher-2020 from Sardar Patel Education Trust, Anand on Engineer's Day 15th September, 2020 on basis of his contribution for research in teaching − learning in education and science and technology.
- ❖ Mechanical Department had arranged webinar on "Fire and Life safety Industrial perspectives", by eminent Speaker: Mr Amit Kshatriya on 29-08-2020.

# Research publications by the faculty& Students

Sr. No.	Name of Faculty	Publication title	Journal/Book
1	N S Mehta	Mandatory Spending on Corporate Social Responsibility – Will It Be a Game Changer for Indian Companies?	International Journal of Scientific & Engineering Research (IJSER), ISSN No. 2229- 5518
2	N S Mehta	e – International Conference on "Recent Innovations in Science, Engineering & Technology"	Govindrao Wanjari College of Engineering & Technology, Nagpur.
3	Dr M. K. Chudasama Mr. Mohit Chandravadiya (P.G. Scholar)	Experimental Investigation on Nylon Glass fiber made using Fused Deposition Modelling Process	International Conference (RAM-2020) at SVNIT-Surat
4	Dr. D.B. Jani	Progress in the arc plasma temperature measurement and its finite element analysis in pulsed MIG welding process	Materials Today: Proceedings 1 (1), 1-6.
5	Dr. D.B. Jani	Advances in clean energy technologies	Academic Press, Elsevier, Sept., 2020.
6	Dr. D.B. Jani Prof. K.K. Bhabhor Mr. Taushif Pathan (P.G. Scholar)	Analysis of front axle for TATA LPT 1109EX36 by analytical and FEA method	International Journal for Advance Research In Science, Communication and Technology Vol. 2(3), 2020

### Achievements and activities of the department

❖ Prof. A. H. Makwana, assistant professor in department of mechanical engineering was awarded PhD from S.V.N.I.T, Surat in 18<sup>th</sup> convocation on 18<sup>th</sup> December, 2020.



- ❖ Dr. D.B. Jani, associate professor was granted annual membership of COMPOSITE EXCELLENT CENTRE OF INDIA for period of November 27, 2020 to November 26, 2021.
- ❖ Dr. D.B. Jani, associate professor is appointed as a Academic editor of "Journal of Material Science Research and Reviews" up to 03-02-2025.
- ❖ Dr. D.B. Jani, associate professor in mechanical engineering department has provided his honorary service as reviewer in the International Journal of Molecular Liquids, Elsevier Publications.
- \* Dr. D.B. Jani, associate professor is awarded recognition as reviewer for International Journal "Applied Thermal Engineering" by the Editors of Journal of Applied Thermal Engineering Elsevier Publications.

## **GTU Result Corner**

Result of Government Engineering College GTU May, 2020 Examination (Online Examination Phase-I)

(Online Examination Phase-I)					
Semester	<b>Total Students</b>	Total Pass	Total Failed	Percentage of Pass	
	appeared	Students	Students	Students	
8	177	177	00	100	
6	443	420	23	94.81	
4	467	400	67	85.65	
2	266	207	59	77.82	

Result of Mechanical Engineering Department GTU May, 2020 Examination (Online Examination Phase-I)

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Semester	<b>Total Students</b>	Total Pass	Total Failed	Percentage of Pass	
	appeared	Students	Students	Students	
8	33	33	00	100	
6	127	121	06	95.28	
4	122	103	19	84.43	
2	80	63	17	78.75	

	Top 3 students CPI wise of Mechanical Engineering Department GTU May, 2020 Examination (Online Examination Phase-I)						
Sr. No	Semester	Enrolment No	Name of Student	СРІ	CGPA	SPI	
1	8	160470107034	MAKADIA HELI	9.83	9.85	10	
2	8	160990136048	SURMA YUVRAJSINH NARENDRASINH	9.73	9.91	10	
3	8	160030107066	MAGIYA VISHWA KIRANBHAI	9.7	9.66	10	
1	6	180183119006	DADI JIYAULHAK BASIRAHEMAD	8.68	9	9.09	
2	6	170180107058	TYAGI SHIVAM JAGMOHAN	8.65	8.75	8.9	
3	6	170180109007	BHABRAWALA ABDULKADIR JOYABBHAI	8.61	8.75	9.19	
1	4	180180107030	PAMNANI AAKASH PARMANAND 9.04		0	9.26	
2	4	180180106112	VEPARI ALIASGER KUTBUDDIN	8.74	0	9.57	
3	4	180180109022	MADARA HUMAM MOHAMMADHANIF 8.65 0		0	9.04	
1	2	190180106007	BATLIWALA MUNIRA MOHAMMADIBHAI	9.38	0	9.45	
2	2	190180107072	TANDEL KRUPALI ASHOKBHAI	9.21	0	9.25	
3	2	190180107004	BAKROLWALA MUSTAFA TAHERBHAI	9.15	0	9.6	

# **Industry Advisory Board meeting**



❖ Industrial Advisory Board meeting was arranged on 21-12-2020 in valuable presence of Mr. Hetal Shah, Commercial Head, Reliance Naval and Engg. Ltd, Mumbai & Mr. Himansu Hathi, Principal Consultant, Mechanical and commissioning at Techofine Engineering and consulting, Vadodara.

### **Placement of students**

Sr. No.	Enrolment no	Name of Students	Company Detail	Designation
1	150180119024	Yogesh Harijan	Gold seal pvt. Ltd	Jr equality Engineer
2	160180119021	Himmatsinh Govindbhai Dodiya	SAL Steel Ltd.	Jr. Engineer
3	160180119059	Dhruval Girishbhai Patel	Department of Post	Branch Post Master
4	160180119010	Bimleshkumar Singh	Aquarius Marine services	Executive
5	160180119039	Himanshukumar Mishra	Bluestar Limited Dadra	Graduate trainee engineer
6	160180119027	Shivesh Jitendra Gupta	Logical processes engineering solutions pvt. Ltd. Thane, Maharashtra 421302	Trainee Engineer
7	150180119173	Hirenkumar Dineshbhai Patel	Waaree Group	QC Engineer
8	160180119107	Gaurav Rakeshranjan Tiwari	Xcitech Technologies.	Marketing Manager
9	160180119072	Patel Umang Dineshbhai	L&T Hydrocarbon Engineering ( S. M. Enterprise)	Jr.Eng - Mechanical (quality control)