

# Mech at a Glance

(E-NEWS LETTER)

HALF YEARLY MAGAZINE

JULY-DEC-2023

MECHANICAL ENGINEERING DEPARTMENT  
GOVERNMENT ENGINEERING COLLEGE PALANPUR



Government of Gujarat

**GOVERNMENT ENGINEERING COLLEGE PALANPUR**

JAGANA, PALANPUR-AHMEDBAD HIGHWAY, PALANPUR - 385011, GUJARAT, INDIA

ફોન નં. (૦૨૭૪૨) ૨૨૦૦૦૫, ૨૨૦૦૦૬

Phone-(02742) 220005, 220006

Website: [www.gecpl.cteguj.in](http://www.gecpl.cteguj.in) Email: [gec-palanpur-dte@gujarat.gov.in](mailto:gec-palanpur-dte@gujarat.gov.in)

# Index

1. Vision and Mission of Institute and Department
2. From the Desk of Head of the Department
3. Faculties of Department
4. Result Analysis
5. Topper of Winter 2023 GTU Exam (Odd Semester)
6. Faculty/staff training/seminar/conferences attended
7. Research Publications
8. Faculty Achievements
9. Departmental activities
10. Student Projects/ Internship
11. Department Activities

## **Editorial Board**

Prof. B. D. Prajapati

**Student Coordinator:-** Purabiya Maharshi, Prajapati Meet

## **Contact us**

Mechanical Engineering Department  
Government Engineering College, Palanpur  
Jagana, Palanpur-Ahmedabad highway,  
Palanpur – 385011,  
Gujarat, India

## Vision and Mission of Institute

### VISION

“To be a leading technical institute facilitating transformation of human resources into socially responsible engineering professionals for sustainable development”

### MISSION

- (1) To achieve academic excellence by developing state-of-the-art laboratories and academic infrastructure.
- (2) To create an ecosystem that promote value based technical education, innovation and entrepreneurship for sustainable development.
- (3) To contribute to industry and society by providing technical and consultancy services.
- (4) To enhance technical competencies of human resources by providing need base trainings and quality improvement programs.

## Vision and Mission of Department

### VISION

"To produce competent mechanical engineers to fulfil needs of society for sustainable development"

### MISSION

- (1) To impart quality technical education in Mechanical Engineering with professional skills.
- (2) To develop linkages with industry for exposure about real life problems and its feasible solution.
- (3) To promote lifelong learning, Innovation and entrepreneurship for sustainable development.
- (4) To assimilate social, cultural and ethical values for betterment of society.

## From the Desk of Head of the Department

Mechanical Engineering is the mother of all branches of engineering. Contributions by this branch are enormous in the growth of technology over the centuries. I think it can be best summed up with a slogan from our professional body, the Institution of Mechanical Engineers – ‘Nothing moves without Mechanical Engineers’. Whether it is an aircraft, car, train or satellite, mechanical engineers play an important role.

Government engineering college Palanpur (GECPL) is really delighted to express that the mechanical department stands on the strength of experienced and well qualified faculty with excellent laboratory facilities, modern computer clusters and systematically designed curriculum and dedicated faculty members make this department a dynamic place to study. Graduates from the Department of Mechanical Engineering are highly-employable and sought after by many prestigious companies.

Recently department have been accredited by National Board of accreditation, New Delhi (NBA) for the year 2022-2025. An accredited degree means that graduates are deemed to have met part or all of the academic requirements and are in a strong position to move on to achieve professional engineering status after a period of initial professional development in industry.

The Department aims to creating and shaping the new generation of mechanical engineers through their innovative teaching methods and practical knowledge. Department also care for students with an effective mentoring system to counsel them regularly. We are confident; our students will always make us proud from their performances wherever they are.

Dr. D. M. Patel  
Head of Department Mechanical

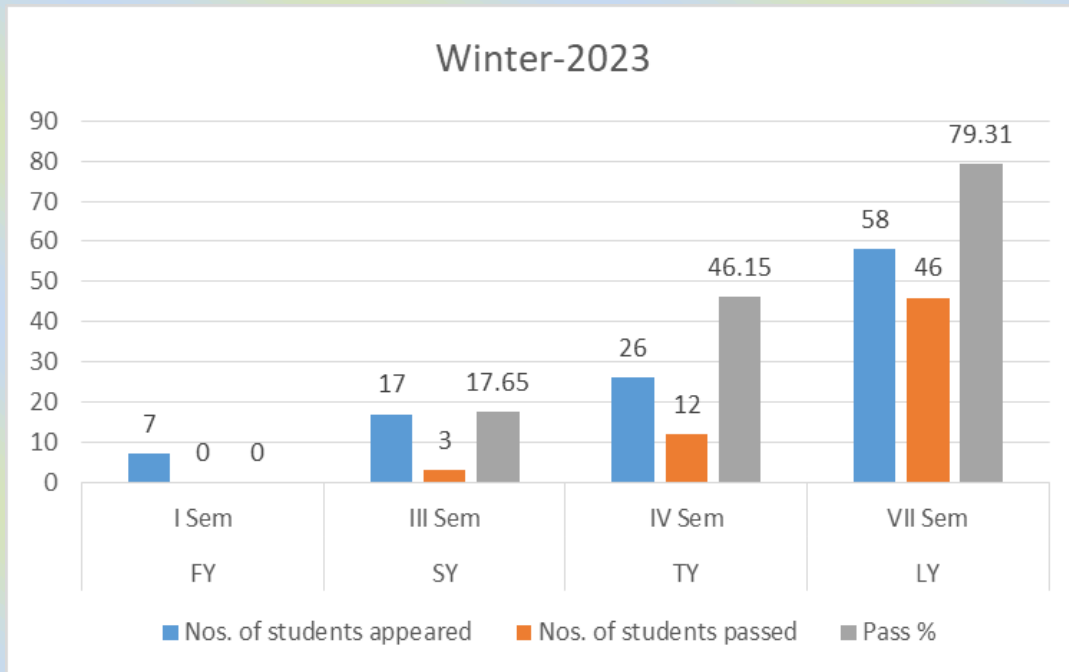


## Faculties of Department

Sr. No.	Name of Faculty	Designation	Area of Work	Teaching Experience (Years)
1.	Dr. D. M. Patel	Professor	Laser processing of materials Micro manufacturing	23
2.	Prof. A. B Patel	Assistant Professor	Thermal Engineering	21
3.	Prof. V. D. Patel	Assistant Professor	Thermal Science	21
4.	Prof. S. K. Dabhi	Assistant Professor	Solar Energy, IC Engine, Auto.	15
5.	Prof. A. D. Patel	Assistant Professor	Machine Design	19
6.	Prof. A. R. Chaudhari	Assistant Professor	Machine Design	15
7.	Prof. P. N. Boka	Assistant Professor	Design Engineering	17
8.	Prof. A. K. Patel	Assistant Professor	Advance Manufacturing Techniques	15
9.	Prof. G. S. Patel	Assistant Professor	Manufacturing Engineering	18
10.	Prof. K. P. Modi	Assistant Professor	Thermal Engineering	13
11.	Prof. K. S. Banker	Assistant Professor	Non-Conventional, Composite Materials	20
12.	Prof. P. K. Gajjar	Assistant Professor	Welding Metallurgy, Advanced Manufacturing Processes	13
13.	Prof. B. D. Prajapati	Assistant Professor	Manufacturing Engineering	20

## Result Analysis

Winter - 2023		Nos. of students appeared	Nos. of students passed	Pass %
FY	I Sem	7	0	0
SY	III Sem	17	3	17.65
TY	IV Sem	26	12	46.15
LY	VII Sem	58	46	79.31



## Topper of Winter 2023 GTU Exam

### 1<sup>st</sup> Semester

Sr. No.	Enrollment No	Name	SPI
1	230610119010	ZALA SURYADEVSIH GAJENDRASINH	6.86

**3<sup>th</sup> Semester**

Sr. No.	Enrollment No	Name	SPI
1	220610119005	SOLANKI DEVANG BABUBHAI	7.83
2	230613119004	MEVADA CHIRAGKUMAR DILIPKUMAR	6.91
3	230613119017	PRAJAPATI PRINCE BHAGVANBHAI	6.83

**5<sup>th</sup> Semester**

Sr. No.	Enrollment No	Name	SPI
1	210610119006	PRAJAPATI MEET	7.96
2	210610119007	PURABIYA MAHARSHI RAJESH	7.96
3	210610119004	VAGHELA VIJAYKUMAR DILIPKUMAR	7.87

**7<sup>th</sup> Semester**

Sr. No.	Enrollment No	Name	SPI
1	200610119012	PRAJAPATI VISHALKUMAR JAYANTIBHAI	9.13
2	210610119502	VISHWAKARMA RITIK BRIJKISHOR	8.13
3	210610119510	THAKKAR ARPANKUMAR SURESHBHAI	8.04

**Faculty/staff training/seminar/conferences attended**

Sr. No	Name of Faculty	Training	Name of Institute/ Organizer	Duration	
				From	To
1	Prof. K.S.Banker	Comprehensive Training On Cnc Programming & Cad/Cam Integration	NPTEL	17-07-2023	21-07-2023
2	Prof. A.D.Patel	Design, Technology And Innovation	NPTEL (Mooc)	24-07-2023	15-09-2023
3	Prof. B.D.Prajapati	Entrepreneurship	NPTEL	24-07-2023	13-10-2023
4	Prof. P.N.Boka	Introduction To Mechanical	NPTEL	24-07-2023	15-09-2023

Sr. No	Name of Faculty	Training	Name of Institute/ Organizer	Duration	
				From	To
		Vibration			
5	Prof. K.S.Banker	Aluminium Based Alloys And Metal Matrix Composites	NPTEL	24-07-2023	13-10-2023
6	Prof. G.S.Patel	Labview Software Programming	NITTTR	31-07-2023	04-08-2023
7	Prof. B.D.Prajapati	Stress Management	NPTEL	01-08-2023	01-09-2023
8	Prof. A.D.Patel	Patent Search For Engineers And Lawyers	NPTEL (Mooc)	08-08-2023	06-10-2023
9	Prof. A.R.Charudhary	Advanced Machining Processes	NPTEL	21-08-2023	13-10-2023
10	Prof. A.K.Patel	Metallurgy For Engineers	NITTTR	16-10-2023	20-10-2023
11	Prof. S.K.Dabhi	Research Paper And Research Proposal Writing	NITTTR	16-10-2023	20-10-2023
12	Prof. B.D.Prajapati	Train The Trainer Program- Automotive System With Sensors	OTHER	30-10-2023	03-11-2023
13	Prof. V.D.Patel	Tot Solar Pv Installers	OTHER	01-11-2023	07-11-2023
14	Prof. A.B.Patel	Alternative Fuels	NITTTR	11-12-2023	15-12-2023
15	Prof. K.S.Banker	Need Of Industry 4.0: Upskilling & Reskilling For Enhancing Employability And Entrepreneurship	ATAL FDP, GEC Surat	18-12-2023	23-12-2023



## Research Publications

### International Conference publications:

Name of staff	Title of paper	Name of journal	Month & Year of publication	Volume Issue Page No. ISSN/ISSP No.
Prof. V.D.Patel	Mathematical modelling and verification of open sun drying of cotton seeds	International Journal of Low-Carbon Technologies, Volume 18, 2023, Pages 887–895, <a href="https://doi.org/10.1093/ijlct/ctad075">https://doi.org/10.1093/ijlct/ctad075</a>	August 2023	1748-1317
Prof. V.D.Patel	Investigation on drying kinetics analysis of gooseberry slices dried under open sun	Environmental Challenges Volume 13, December 2023, 100778	October 2023	2667-0100
Prof. G. S. Patel	Evaluating the cooking oil container filling machine's performance by Altering the actuation devices (experimental methods)	International Journal of Applied Engineering & Technology; Vol. 5 No. S6, (Oct - Dec 2023)	October 2023	2633-4828
Prof. V.D.Patel	Various application of solar air heater with thermal storage: a comprehensive review	Journal of Technology, VOLUME 11 ISSUE 12, 2023	November 2023	10123407
Prof. P.N.Boka	A case study on distillate output of solar still using toner waste powder coated absorber plate	Case Studies in Thermal Engineering Volume 53, January 2024, 103903, <a href="https://doi.org/10.1016/j.csite.2023.103903">https://doi.org/10.1016/j.csite.2023.103903</a>	December 2023	2214-157X

## Faculty Achievements

- Prof. A. R. Chaudhary achieved doctorate degree on November 29, 2023 from Gujarat Technological University, Ahmedabad. His title of research focused on “Experimentation and Simulation of Electro-Chemical Magnetic Abrasive Finishing”
- Prof. A. K. Patel achieved his doctorate on December 2, 2023, from Gujarat Technological University (GTU) Ahmedabad. His research focused on "Development of a Universal Centrifugal Casting Machine and Experimental Investigation of the Properties of Al-Si Alloy."
- Patent No.:491903 Application No.:202121002423 Title: Eco Green Titanium Dioxide Photolytic Catalytic Converter Granted on 29/12/2023 to Prof. S. K. Dabhi

## Student Projects/ Internship

Sr. No.	Summer Internship [ Name of Company]	Name of Guide
1.	Ammann Apollo Industry	
2.	Aqua Engineering Pvt Ltd	
3.	Arihant Pumps Pvt.Ltd. (Aroma Group)	
4.	Banco India	
5.	C.G Metal Lab, Chhatral	
6.	Cargo Motors Pvt. Ltd	
7.	Geeta Machine Tools Private Limited	
8.	Gurudev Creation	
9.	Hajee A.P. Bava Infra Limited	
10.	Halleys Motors Private Limited	
11.	Himalaya Engineering Company	
12.	Hyundai Bhurawala Motors	
13.	Hyundai Bhurawala Motors	

14.	I Tile Limited Company	All Faculty
15.	I-Flp Explosionproof Pvt.Ltd.	
16.	Impress Engineering	
17.	Jai Ganesh Autolink Pvt Ltd	
18.	Jyoti Engineering Work Umbergaon	
19.	Khodiyar Cad Centre (I). Pvt. Ltd.	
20.	Leak Proof Engineering	
21.	M/S Yashi Enterprises	
22.	Maharshi Udyog	
23.	Maruti Industries	
24.	Mectech Projects Pvt. Ltd.	
25.	Microtech	
26.	Parth Autolink Visnagar	
27.	Sal Steel Ltd	
28.	Shiv Fabricator	
29.	Shoham Engineering Works	
30.	Solenis Chemicals India Private Limited	
31.	Super Quali Cast (India) Pvt. Ltd	
32.	Swastik Engineering Company	
33.	Tile Limited Company	
34.	Umiko Pumps & Motors	
35.	Vartix Aerospace Pvt. Ltd.	
36.	Volkswagen Mehsana	

## Department Activities

### Industrial Visit

Sr. No.	Name of Industry	Date of Visit	Semester
1	Banas Dairy, Palanpur	05-10-2023	55
2	Ratnamani Techno cast PVT LTD	10-10-2023	46





- Seminar on Entrepreneurship step toward 'Atmanirbhar Bharat' by Mr. P.N. Boka on 21<sup>st</sup> August, 2024, total 111 students attended the seminar.
- One day workshop on “Solidworks” by Mr. Mukesh Yogi was conducted on 15<sup>th</sup> September, 2024.
- One day work shop on “i-talk sensitization workshop” Mr. Padhiyar was conducted on 26<sup>th</sup> September, 2024.