

# Mech at a Glance

(E-NEWS LETTER)

HALF YEARLY MAGAZINE

JULY- DEC 2022

MECHANICAL ENGINEERING DEPARTMENT  
GOVERNMENT ENGINEERING COLLEGE PALANPUR



Government of Gujarat

**GOVERNMENT ENGINEERING COLLEGE PALANPUR**

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### **Editorial Board**

Prof. B. D. Prajapati

### **Contact us**

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## 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 (As on July 2022)

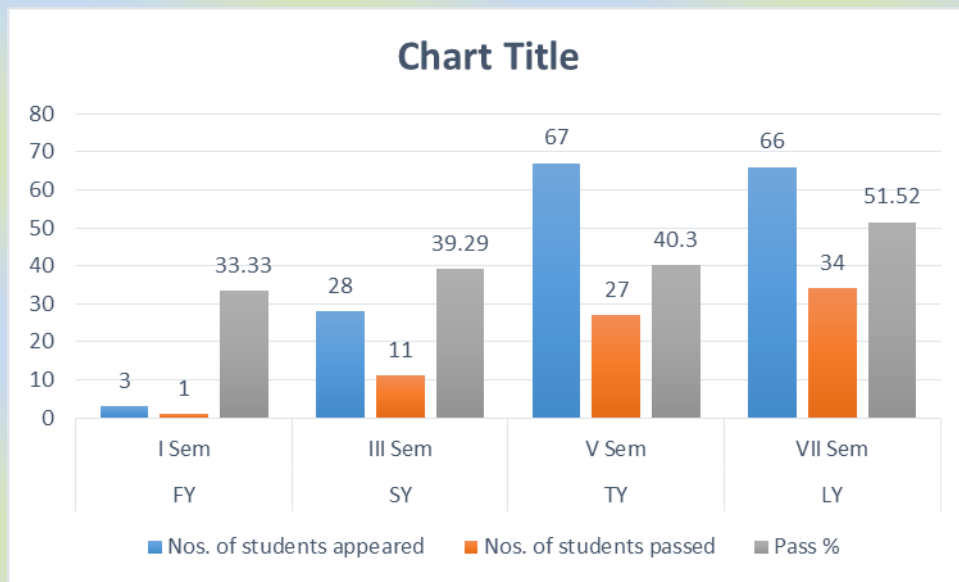
Sr. No.	Name of Faculty	Designation	Area of Work	Teaching Experience (Years)
1	Prof. (Dr.) K. B. Judal	Principal & Professor	Computer aided Design and Manufacturing Unconventional Manufacturing Process	21
2	Dr. D. M. Patel	Professor	Laser processing of materials Micro manufacturing	22
3	Prof. A. B Patel	Assistant Professor	Thermal Engineering	20
4	Prof. V. D. Patel	Assistant Professor	Thermal Science	20
5	Prof. S. K. Dabhi	Assistant Professor	Solar Energy, IC Engine, Auto.	14
6	Prof. Dr. N. A. Patel	Assistant Professor	CAD/CAM	20
7	Prof. A. D. Patel	Assistant Professor	Machine Design	15
8	Prof. A. R. Chaudhari	Assistant Professor	Machine Design	14
9	Prof. P. N. Boka	Assistant Professor	Design Engineering	14.3
10	Prof. A. K. Patel	Assistant Professor	Advance Manufacturing Techniques	14

## Innovative Practice in Teaching-learning/Assessment Process

Sr. No.	Methodology	Related Subject	Class	Name Of Staff
1	Assessment by Power point presentation	Automobile Engineering	6th sem	ADP

## Result Analysis

Winter - 2022		Nos. of students appeared	Nos. of students passed	Pass %
FY	I Sem	3	1	33.33
SY	III Sem	28	11	39.29
TY	V Sem	67	27	40.30
LY	VII Sem	66	34	51.52



## Topper of summer 2022 GTU Exam

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

Sr. No	Enrollment No	Name	SPI
1	220610119005	Solanki Devang Babubhai	7.82

### 3<sup>rd</sup> Semester

Sr. No	Enrollment No	Name	SPI
1	210610119004	Vaghela Vijaykumar Dilipkumar	7.57
2	210610119012	Kori Mayankkumar Santoshi	7.43
3	210610119009	Prajapati Bhartkumar Ramabhai	7.26

### 5<sup>th</sup> Semester

Sr. No	Enrollment No	Name	SPI
1	200610119012	Prajapati Vishalkumar Jayantibhai	8.78
2	200610119013	Darji Mandip Ganpatbhai	8.04
3	210610119502	Vishwakarma Ritik Brijkishor	7.91

### 7<sup>th</sup> Semester

Sr. No	Enrollment No	Name	SPI
1	190610119053	Sharma Priyanshu Nagarmal	8.92
2	190610119050	Raval Kuldeep Naileshkumar	8.21
3	190610119047	Prajapati Rajeshkumar Virabhai	8.13

## Faculty/staff training/seminar/conferences attended

Sr. No	Name of Faculty	Training	Name of Institute/Organizer	Duration	
				From	To
1	K. P. Modi	Fundamentals of Manufacturing Processes	NPTEL	25-07-2022	14-10-2022
2	P. K. Gajjar	Industrial NDT for Welding & Castings	Other	01-08-2022	05-08-2022
3	A. R. Chaudhari	Industrial NDT for Welding & Castings	Other	01-08-2022	05-08-2022
4	K.S. Banker	Industrial NDT for Welding & Castings	Other	01-08-2022	05-08-2022
5	V. D. Patel	Industrial NDT for Welding & Castings	Other	01-08-2022	05-08-2022
6	P. N. Boka	Industrial NDT for Welding & Castings	Other	01-08-2022	05-08-2022
7	A. K. Patel	Ethics In Engineering Practice	MOOC	22-08-2022	14-10-2022
8	S. K. Dabhi	Performance Appraisal and Development	NPTEL	29-08-2022	02-09-2022
9	Dr. N. A. Patel	Processing and Characterization of Materials	Other	19-09-2022	23-09-2022
10	K. P. Modi	Processing and Characterization of	Other	19-09-2022	23-09-2022

Sr. No	Name of Faculty	Training	Name of Institute/Organizer	Duration	
				From	To
		Materials			
11	A. K. Patel	Processing and Characterization of Materials (PCM2022)	GEC, Gandhinagar	19-09-2022	23-09-2022
12	K. P. Modi	MATLAB For All	NITTTR	19-12-2022	23-12-2022

## Research Publications

Name of staff	Title of paper	Name of journal	Month & Year of publication	Volume Issue Page No. ISSN/ISSP No.
A. K. Patel	Experimental investigation of effect of process parameters on the tensile strength of a near eutectic aluminum-silicon alloy in ununiversal centrifugal casting machine.	International Journal of Metalcasting	October, 2022.	
K. S. Banker	WEDM Machining And Augmentation Of Aluminum Metal Matrix Composite By Stir Casting Process: A Critical Review.	Journal For Basic Sciences	November, 2022.	Volume 22, Issue 11, 2022 388-408 ISSN NO : 1006-8341
Dr. Dhaval M. Patel	Study the effect of fiber laser parameter on bending stiffness of CoCr stent manufactured by fiber laser	International Journal of Mechanical Engineering	Vol. 7 No. 1 2022 Pages: 5306-5315	ISSN: 0974-5823 Scopus indexed Impact Factor : 2.1



## Student Projects

Sr. No.	Internship	Name of Guide
1.	Accident prevention system	All Faculty
2.	Barrel method for recharging of ground water	
3.	Bus interior design	
4.	Construct a towing board for two wheeler tyre puncture application	
5.	Design of disposable plastic glass for hot beverages	
6.	Zero energy household	
7.	Wireless ceiling fan holder	
8.	Drive through car washing vending machine	
9.	QR based monthly pass system	
10.	Integrated automatic hydraulic jack in car	
11.	Automatic solar panel cleaning system	
12.	Mechanical alarm system for farm safety	
13.	River cleaning machine	
14.	Advanced system in passenger bus	
15.	Solar operated electric car	