

# Mech at a Glance

(E-NEWS LETTER)

HALF YEARLY MAGAZINE

JULY- DECEMBER 2017

MECHANICAL ENGINEERING DEPARTMENT  
GOVERNMENT ENGINEERING COLLEGE PALANPUR



Government of Gujarat

**GOVERNMENT ENGINEERING COLLEGE PALANPUR**

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## Index

1. Vision and Mission of Institute and Department
2. From the Desk of Head of the Department
3. Faculties of Department
4. Innovative Practice in Teaching-learning/Assessment Process
5. Training attended by Students/Faculties
6. Result Analysis
7. Topper of Winter 2017 GTU Exam (Odd Semester)
8. Research Publications
9. Departmental activities
10. Achievements

### **Editorial Board**

Prof. A B Patel,  
Prof. A D Patel,  
Prof. N T Raval,

### **Contact us**

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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 Department of Government Engineering College Palanpur is well equipped with all latest equipments and instruments; it is having 10 laboratories for under graduate course and separate workshop. The department is having research and project work facility. Staff and supporting faculties are well qualified and expert in their area of work and dedicated to assigned task. Year by year results and placement of our students is improving with increasing number. Projects assigned to students are unique, innovative and every year one or two projects selected for vibrant Gujarat. Our students also participated in state and national level events and also win prizes. Department is having license software for computing facility and also own library for knowledge enhancement.



I wish to all students for better future and contribute for national development by giving best of their abilities.

## Faculties of Department (As on December 2017)

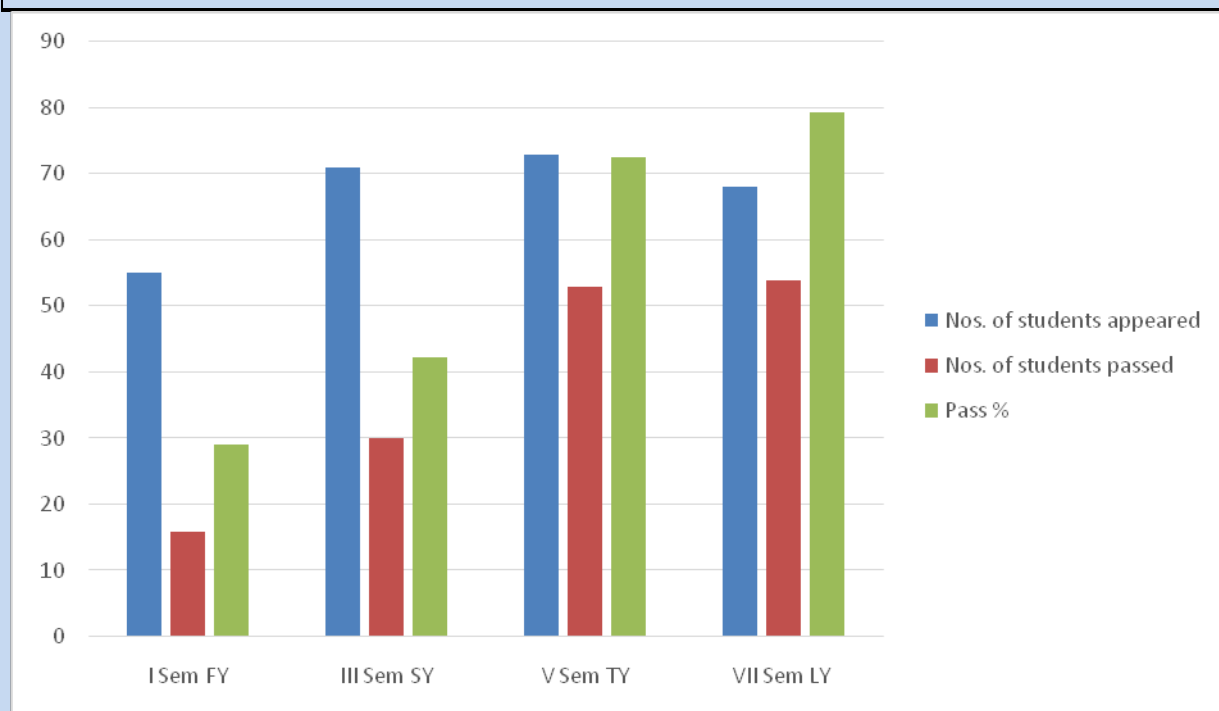
Sr. No.	Name of Faculty	Designation	Area of Work	Teaching Experience (Years)
1	Prof. (Dr.) K B Judal	Principal & Professor	Computer aided Design and Manufacturing Unconventional Manufacturing Processes	17
2	Prof.(Dr.) J A Vadher	Professor& Head	Production, Industrial, Automation	19.5
3	Prof. A B Patel	Assistant Professor	Thermal Engineering	16
4	Prof. V.D.Patel	Assistant Professor	Thermal Science	16
5	Prof. N. A. PATEL	Assistant Professor	CAD/CAM	13.5
6	Prof. K. V. Patel	Assistant Professor	Machine Design	12
7	Prof. A. D. PATEL	Assistant Professor	Machine Design	14
8	Prof. A. R. Chaudhari	Assistant Professor	Machine Design	10
9	Prof. P. N. BOKA	Assistant Professor	Design Engineering	12
10	Prof. A.K.Patel	Assistant Professor	Advance Manufacturing Techniques	10
10	Prof. N.T.Raval	Assistant Professor	CAD/CAM	4

## Innovative Practice in Teaching-learning/Assessment Process

Sr. No.	Methodology	Related Subject	Class	Name Of Staff
1	Design of any element from IC/Auto lab (ex. Fan hook, door handle, door hing screws etc...)(on the spot design)	D. M. E.	5 <sup>th</sup> Mech	Prof. A. D. Patel
2	Models were used in laboratory of Engineering Graphics (EG) to conceptualize the problem.	E.G.	1 <sup>st</sup> Sem	Prof. A. B. Patel

## Result Analysis

Winter - 2017		Nos. of students appeared	Nos. of students passed	Pass %
FY	I Sem	55	16	29.09
SY	III Sem	71	30	42.25
TY	V Sem	73	53	72.60
LY	VII Sem	68	54	79.41



## Topper of Winter 2017 GTU Exam

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

Sr. No	Enrollment No	Name	SPI
1	170610119063	YADAV RAHULKUMAR SHIVMURAT	8.28
2	170610119053	RUPESH KUMAR SINGH	8.10
3	170610119044	PRAJAPATI GOPALBHAI BHAGAVANBHAI	7.10

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

Sr. No	Enrollment No	Name	SPI
1	160610119012	GURJAR SAMAYKUMAR RAGNATHBHAI	8.64
2	160610119055	SINGH UJWAL	8.06
3	160610119005	BHAVSAR NEEL PIYUSH	7.88

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

Sr. No	Enrollment No	Name	SPI
1	150610119061	SUTHAR SACHINKUMAR JAGADISHLAL	9.06
2	150610119064	VAGHELA AMITSINGH KARANSINGH	8.74
3	150610119056	RAJPUT UMANG LAKHVEERSINGH	8.58

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

Sr. No	Enrollment No	Name	SPI
1	140610119019	JOSHI HARSH BHUPENDRAKUMAR	9.13
2	140610119005	CHAUDHARY DIPAKKUMAR MEGHARAJBHAI	8.80
3	140610119013	GAJJAR VIKAS DINESHBHAI	8.80

## Faculty/staff training/seminar/conferences attended

Sr. No	Name of Faculty	Training	Name of Institute/Organizer	Duration	
				From	To
1	Prof.A.D.Patel	Resource Management for Manufacturing Sector	NITTTR, Bhopal	03-07-2017	14-07-2017
2	Prof.P.N.Boka	Resouce Management for Manufacturing Sector	NITTTR, Bhopal	03-07-2017	14-07-2017
3	Prof.K.V.Patel	Resource management for manufacturing sector	NITTTR, Bhopal	03-07-17	14-07-2017



### International Journal publications:

Prof.(Dr.) J A Vadher

1. **Heat transfer enhancement technique Review: Thermal Performance Factor approach-** Under review in Beni-Suef University Journal of Basic and Applied Sciences with ISSN- 2314-8535. Elsevier, 5 Oct **2017**.
2. **Numerical Analysis of Centrifugal Compressor for Process Industry**, International Journal of recent trends in Engineering and Research, ISSN: 2455-1457, Impact factor: 4.101, Prof. B M Trivedi, Dr. Jeetendra. A. Vadher, Volume 3, Issue 4, **2017**.  
[http://www.ijrter.com/issue-papers/?select\\_volume=3&select\\_issue=4](http://www.ijrter.com/issue-papers/?select_volume=3&select_issue=4)
3. **Computational Fluid Dynamics Analysis for Centrifugal Compressor using Advanced Technique**, International Journal of Advance Engineering and Research Development (IJAERD), Volume 04 Issue 10, October-**2017**, Impact factor: 4.72
4. **Computational Fluid Dynamics Analysis for Duct line of a Centrifugal compressor to simulate the dynamic response**, International Journal of Advance Engineering and Research Development (IJAERD), Volume 04 Issue 10, October-**2017**, Impact factor: 4.72
5. **Optimization of green sand casting process using Genetic algorithm**, Trends in Machine Design, VOL 4 Issue 2, Page No. 25-29, **2017**.
6. **Different Advances of Metal matrix Composite- A Review**, International Journal of Advance Engineering and Research Development, Mehul G. Mehta, Dr Jeetendra A. Vadher Volume 4, Issue 8, August -**2017**, Scientific Journal of Impact Factor (SJIF): 4.72, e-ISSN (O): 2348-4470 p-ISSN (P): 2348-6406,
7. **Study of Application and Advantages of Composite Materials**, International Journal of Management, IT & Engineering, Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gate as well as in Cabell's Directories of Publishing Opportunities, U.S.A, Vol. 7 Issue 10, October **2017**, ISSN: 2249-0558 Impact Factor: 7.119,
8. **Study of Important Manufacturing Processes used for Composite Materials**, International Journal of Advance Engineering and Research Development, MehulG.Mehta, Dr Jeetendra A. Vadher Volume 4, Issue 8, August -**2017**, Scientific Journal of Impact Factor (SJIF): 4.72, e-ISSN (O): 2348-4470 p-ISSN (P): 2348-6406,
9. **A Study on Different Failures of Composite Materials**, International Journal of Advance Engineering and Research Development, Mehul G. Mehta, Dr. Jeetendra A. Vadher Volume 4, Issue 9, September -**2017**, Scientific Journal of Impact Factor (SJIF): 4.72, e-ISSN (O): 2348-4470 p-ISSN (P): 2348-6406,
10. **A Study of Improvement in Different Mechanical Properties for Aluminum Based Metal Matrix Composite**, International Journal of Advance Engineering and Research Development, Mehul Mehta, Dr. Jeetendra A. Vadher Volume 4, Issue 10, October - **2017**, Scientific Journal of Impact Factor (SJIF): 4.72, e-ISSN (O): 2348-4470 p-ISSN (P): 2348-6406,
11. **A review: Sustainability in Manufacturing Industries – case study of steel re rolling mills**. International Journal of modern trends in Engineering and Research, ISSN(Online) 23499745, ISSN Print: 23938161, Volume -4, Issue: 8 Aug-**2017**, page:68-74. Impact Factor: 4.364

- 12. Prospects for Energy saving and Increase the Efficiency in Steel Re-Rolling Mills.** International Journal of Modern Trends in Engineering and Research, ISSN (Online) 23499745, ISSN Print: 23938161, Volume -4, Issue: 10, Oct-2017, page: 265-268. Impact Factor: 4.364
- 13. Key Performance Indicators of Steel Re-Rolling Mills for Sustainable Manufacturing.** International Journal of Modern Trends in Engineering and Research, ISSN (Online) 23499745, ISSN Print: 23938161, Volume -4, Issue: 12, Dec-2017, page: 311-315. Impact Factor: 4.364
- 14. Energy Performance Assessment by Means of Processing Heating Assessment and Survey Tool (PHAST) and Feasibility Evaluation of waste heat recuperation in the Reheat furnace at Steel Re \_ Rolling mill.** International Journal of Modern Trends in Engineering and Research, ISSN (Online) 23499745, ISSN Print: 23938161, Volume -4, Issue: 11, Nov-2017, page: 263-266. Impact Factor: 4.364

#### International Conference publications:

**Prof.(Dr.) J A Vadher**

- 1. Numerical Analysis of Conical Heat Exchanger, ICRISSET, IJTE special issue- 2017, Page No. 18-21.**

#### National Journal publications:

**Prof.(Dr.) J A Vadher**

- 1. Numerical Analysis of Conical Heat Exchanger- Published in Indian Journal of Technical Education with ISSN-0971-3034 (ISTE). (Special issue for ICRISSET-2017).**

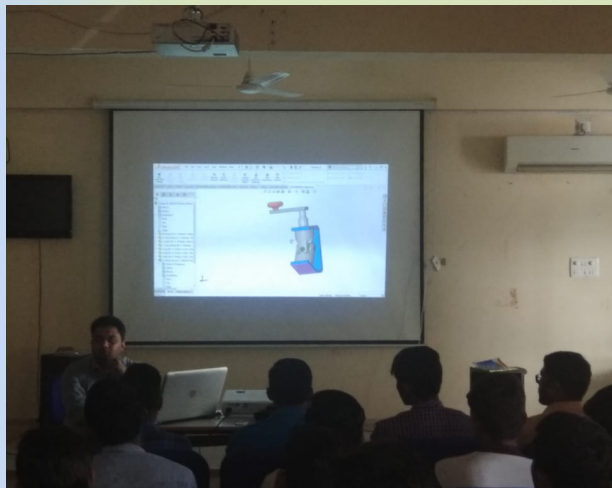
## Department Activities

- An expert lecture was arranged on “Enhancing Engineering Graphics understanding using Multimedia” by Prof Anand S. Patel, Assistant Professor, Mechanical Engineering Department, Institute of Technology, Nirma University, Ahmedabad on 07/12/2017.





- An expert lecture was arranged on “Fusion 360” by Mr. Nimesh Patel, Director, Khodiyar CAD center, Ahmedabad on 07/12/2017.



- A guest lecture by ICE Team and Prof. K. V. Patel, (Asst. Prof. Mechanical Department) was organized by CAREER DEVELOPMENT CELL (Part of Industry Institute Interaction Cell) on 8th August 2017. They guided the students about the significance of GATE. They gave an overlook on importance of GATE in Public Service Sectors (PSU). B.E. students got the benefit of this lecture. Faculty coordinators from different department coordinated the program successfully.



#### Industrial Visit

Sr. No.	Name of Industry	Day	Semester
1	Costal Gujarat Power Ltd., Mundra, Kutch, Gujarat	9/10/2017	7