

# Mech at a Glance

(E-NEWS LETTER)

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MECHANICAL ENGINEERING DEPARTMENT  
GOVERNMENT ENGINEERING COLLEGE PALANPUR



Government of Gujarat

**GOVERNMENT ENGINEERING COLLEGE PALANPUR**

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### **Editorial Board**

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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

Staying together is 'progress' Working together is 'success'

The even semester of academic year 2018-19 was full of activities and achievements. During the annual sports and cultural event "PRAXES 2K19", Mechanical Engineering students showed their skills and abilities in every activity and event got tremendous response. These all activities are helpful in grooming the overall personality of students and in boosting their confidence. Best infrastructure highly qualified and experienced Professors, State of art world class laboratories at affordable fees structure for all class of students in the society. We are having our own Boys Hostel, Girls Hostel, Canteen, facility for students. Student friendly and disciplined atmosphere will make the students to gain their knowledge effectively and efficiently. I welcome all students to join our College, such that you can be best crafted engineer and secure jobs in top most companies of the world.



## Faculties of Department (As on December 2018)

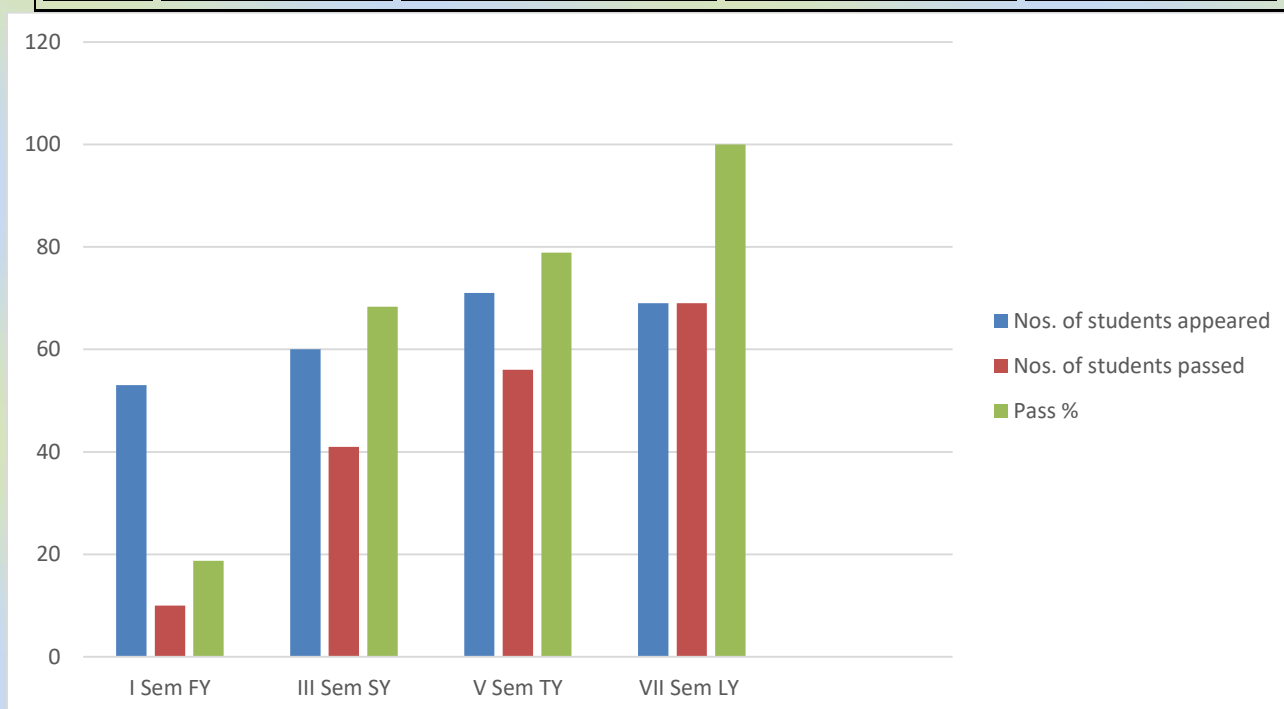
Sr. No.	Name of Faculty	Designation	Area of Work	Teaching Experience (Years)
1	Prof. (Dr.) K B Judal	Principal & Professor	Computer aided Design and Manufacturing Unconventional Manufacturing Process	18.5
2	Prof. (Dr.) J A Vadher	Professor & Head	Production, Industrial, Automation	21
3	Prof. A B Patel	Assistant Professor	Thermal Engineering	17.5
4	Prof. V.D.Patel	Assistant Professor	Thermal Science	17.5
5	Prof. N. A. PATEL	Assistant Professor	CAD/CAM	14.5
6	Prof. A. D. PATEL	Assistant Professor	Machine Design	15.5
7	Prof. A. R. Chaudhari	Assistant Professor	Machine Design	11.5
8	Prof. P. N. BOKA	Assistant Professor	Design Engineering	13.5
9	Prof. A.K.Patel	Assistant Professor	Advance Manufacturing Techniques	11.5
10	Prof. N.T.Raval	Assistant Professor	CAD/CAM	5.5

## Innovative Practice in Teaching-learning/Assessment Process

Sr. No.	Methodology	Related Subject	Class	Name Of Staff
1	Video lecture available from NPTEL related to Fluid Mechanics (FM) and Renewable Energy Engineering (REE) Course is used for teaching-learning process.	Renewable Energy Engineering	8 <sup>th</sup> sem	Prof.A.B.Patel
2	Real life problem statements for student projects.	Project	8 <sup>th</sup> sem	Prof.N.A.Patel

## Result Analysis

Summer - 2019		Nos. of students appeared	Nos. of students passed	Pass %
FY	II Sem	53	10	18.77
SY	IV Sem	60	41	68.33
TY	VI Sem	71	56	78.87
LY	VIII Sem	69	69	100.00



## Topper of winter 2018 GTU Exam

### 2<sup>nd</sup> Semester

Sr. No	Enrollment No	Name	SPI
1	180610119021	MAKNOJIYA MOHAMMAD YASINBHAI	7.73
2	180610119044	PATEL SMITKUMAR RAMESHBHAI	7.36
3	180610119013	CHORASIYA AKSHAYKUMAR RAJESHBHAI	7.32

### 4<sup>th</sup> Semester

Sr. No	Enrollment No	Name	SPI
1	170610119014	HASHMI MOH HARIS RIYAZ ASLAM	8.33
2	170610119063	YADAV RAHULKUMAR SHIVMURAT	8.27
3	180613119005	LODHA JAYESH DEEPAK	8.09

### 6<sup>th</sup> Semester

Sr. No	Enrollment No	Name	SPI
1	160610119027	PANCHAL JAY PARESHBHAI	8.48
2	160610119012	GURJAR SAMAYKUMAR RAGNATHBHAI	8.18
3	160610119020	MALI BHAVIN RAMESHBHAI	8.18

### 8<sup>th</sup> Semester

Sr. No	Enrollment No	Name	SPI
1	150610119019	GALSAR RAJKUMAR MANHARSHIN	9.64
2	150610119056	RAJPUT UMANG LAKHVEERSINGH	9.48
3	150610119021	GEHLOT JITENDRAKUMAR MAKNABHAI	9.48

## Training attended by Student

Sr. No	Name of Industry	Date	Duration	No. of Student
1	Grasim Industry Limited	04/06/19 to 15/06/19	2 week	2
2	Banaskantha District Co-operative Milk Producers' Union Ltd., Banas Dairy	11/06/19 to 16/06/19	1 week	5
3	Riya Hyundai	01/06/19 to 15/06/19	2 week	1

## Faculty/staff training/seminar/conferences attended

Sr. No	Name of Faculty	Training	Name of Institute/Organizer	Duration	
				From	To
1	Prof.N.A.Patel	Entrepreneurship Development	EDII, Gandhinagar	11-03-2019	15-03-2019
2	Prof.P.N.Boka	Computational Methods For Mechanical Engineers Using mATLAB	"L. D. College of Engineering, Ahmedabad"	11-03-2019	15-03-2019

## Research Publications

### International Conferences:

1. Samir K. Raval and K.B. Judal (2019) "A Review on residual stress in friction stir welding: causes, measuring techniques, nature of distributions, consequences and control, Gujarat Technological University International Conference, ICON-2019, March 14-16, 2019.
2. Ketual Brahmhatt and K. B. Judal (2019), EXPERIMENTAL INVESTIGATION ON NATURAL FIBERS COMPOSITE FOR SUSTAINABLE DEVELOPMENT, International Conference on Advances in Power Generation from Renewable Energy Sources (APGRES-2019).

## Student Projects

Group No.	Title of the project	Project Guide
1	TO DESIGN THE SYSTEM FOR PREDICTION OF BRAKAGE OF CLUCH WIRE/BRAKE WIRES IN TWO WHEELER	Prof. A.B.PATEL
2	DEVELOPMENT OF SHEET METAL CUTTING MACHINE USING PNEUMATIC POWER	Prof. A.K.PATEL
3	DEVELOPMENT OF PNEUMATIC BENDING MACHINE	Prof. A.K.PATEL
4	DESIGN AND FABRICATION OF CONTINUOUS VARIABLE TRANSMISSION- A STUDY MODEL	Prof. A.D.PATEL
5	WATER LIFTING USING ARCHIMEDES SCREW CONCEPT-A WAY TO SAVE ELECTRICITY	Prof. A.D.PATEL
6	MAINTENANCE & PERFORMANCE TESTING OF SOLAR FLATE PLATE COLLECTOR TEST RIG	Prof. V.D.PATEL
7	DESIGN AND DEVELOPMENT OF AUTOMATIC ELECTRIC AGRO-VEHICLE	Prof. N.A.PATEL
8	DEVELOPMENT OF FIVE AXIS ARM ROBOT	Prof. N.T.RAVAL
9	TO LIFT THE ENGINE AND HEAVY PART FROM THE VEHICLE UNDER MAINTENANCE WITHOUT DAMAGE TO OTHER PARTS AND WITH COMFORT	Prof. A.B.PATEL
10	DESIGN AND DEVELOPMENT OF TMT BAR BENDING MACHINE	Prof. N.A.PATEL
11	DESIGN AND DEVELOPMENT OF SPOT WELDING ROBOT	Prof. N.A.PATEL
12	DESIGN AND FABRICATION OF METAL DETECTOR AND EXTRACTOR IN CATTLE FEED	Prof. P.N.BOKA
13	DESIGN & FABRICATION OF AUTOMATIC SEALING OF BAGS FOR CATTLE FOOD INDUSTRY	Prof. P.N.BOKA
14	DESIGN AND DEVELOPMENT OF PEDAL OPERATED REAL TIME HACKSAW MACHINE	Prof. N.T.RAVAL
15	DESIGN AND DEVELOPMENT OF MAGNETIC ABRASIVE FINISHING MACHINE	Prof. A.R.CHAUDHARY
16	DESIGN & DEVELOPMENT OF ELECTROCHEMICAL DISOLUTION MACHINE	Prof. A.R.CHAUDHARY
17	MAINTANCE & PERFORMANCE TESTING OF HEAT PUMP TRAINER TEST RIG	Prof. V.D.PATEL
18	INVESTIGATE EFFECT OF WELD PARAMETERS ON WELD JOINT IN TIG BY SOLDAMATIC SIMULATOR	Prof. N.A.PATEL



## Achievements

Sr. No.	Enrollment Number	Name of Student	Name of Event	Place	Date	Outcome
1	170610119001	BALOCH AMAN	PRAXES 2019 (ROB THE BALL)	GEC PALANPUR	28 <sup>TH</sup> FEB – 1 <sup>ST</sup> MARCH 2019	1 <sup>ST</sup> RANK
2	170610119007	CHAUDHAN DHAVAL	PRAXES 2019 (CONQUEROR OF ARENA)	GEC PALANPUR	28 <sup>TH</sup> FEB – 1 <sup>ST</sup> MARCH 2019	1 <sup>ST</sup> RANK
3	170610119014	HASHANI HARIS	PRAXES 2019 (ROB THE BALL)	GEC PALANPUR	28 <sup>TH</sup> FEB – 1 <sup>ST</sup> MARCH 2019	1 <sup>ST</sup> RANK
4	170610119017	JADAV PARTH	PRAXES 2K19 (ROB THE BALL)	GEC PALANPUR	28 <sup>TH</sup> FEB – 1 <sup>ST</sup> MARCH 2019	1 <sup>ST</sup> RANK
5	170610119017	JADAV PARTH	PRAXES 2K19 (CONQUEROR OF ARENA)	GEC PALANPUR	28 <sup>TH</sup> FEB – 1 <sup>ST</sup> MARCH 2019	1 <sup>ST</sup> RANK
6	170610119026	PANCHAL DILAK D	PRAXES 2K19 (CONQUEROR OF ARENA)	GEC PALANPUR	28 <sup>TH</sup> FEB – 1 <sup>ST</sup> MARCH 2019	1 <sup>ST</sup> RANK