



# Biomed... newsletter of Dept. of Biomedical Engg. at GPGA

December 2018 issue

Establishment year: 2009  
AICTE sanctioned intake:  
60  
Total no. of teaching  
faculties: 5

## Vision of the department:

Our vision is to nurture engineers who can comprehend the ethical, social, and economic implications of their work by imparting quality education through integration of engineering and medical sciences for the improvement of human health care.”

## Mission of the department:

- To create a free and open learning environment that fosters the intellectual growth of students.
- To provide skill based technical education.
- To enable students to be sensitive towards the ethical issues of medical industry
- To prepare students for confronting medical challenges by applying engineering

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## An Expert Lecture on “RESUME WRITING AND INTERVIEW SKILLS”



## Faculty details:

1. Mr. R.D.Motka (M.Tech, Digital comm., experience: 14 years)
2. Ms. J.H.Suthar(M.E.Biomedical engg.), experience: 14 years)
3. Ms. A.R.Dalwadi, (BE, Biomedical engg., experience:8 years)
4. Ms. M.M.Patel, (M.E., Biomedical engg., experience: 8 years)
5. Ms. N.B.Modi, (M.E., Biomedical Engg., experience: 8 years)

The resume acts as a bridge between you and the prospective recruiter. Hence the importance of a resume can never be underestimated. To make our students capable enough to express their skills, their future plans and their knowledge, Depart-

ment of Biomedical Engg. at GPGA organized an expert lecture on “Resume writing and Interview skills”. The lecture was delivered by Ms. Nirali Shah, a soft skill trainer, freelancing. The lecture was organized on 4th of

August, 2018. Total 40 students of final year participated in the event and benefitted from the expert guidance of Ms. Nirali Shah.

## Inter-college participation

One of the students of Biomedical Engineering Department, Bhoomi Prajapati, participated in the paper presentation in *Convergence* event, organized at U.V.Patel College Of Engineering, Ganpat University, on 16-17th March, 2018. Ms. Bhoomi secured first position in the event.

## STUDENT ACHIEVEMENTS

Biomed



**Dept. of Biomedical  
Engg., GPGA**

SR. NO.	SEMES-TER	ENROLL-MENT NO.	NAME OF STUDENT	GTU BRAN-CH WISE RANK (CPI WISE)
1	2	176140303025	JOSHI MARGI H.	2
2	2	176140303032	PANCHAL RITU H.	3
3	4	166140303025	PARMAR MANINI J.	1
4	4	166140303005	CHAHANA KALPAN P.	3
5	4	166140303029	PATEL DEVANSHI B.	6
6	6	156140303059	VASANI KHEVNA V.	1
7	6	156140303008	DERASARI AISHWARYA B.	2
8	6	156140303050	SHAH AYUSHI H.	3

## RESULT ANALYSIS

SR. NO.	SEMESTER	NO OF STUDENTS AP-PEARED	NO OF STUDENTS PASSED	PERCENTAGE RESULT
1	6	28	25	89.29
2	4	40	18	45
3	2	50	4	8

## Biomedical Innovations 2018

People who are unable to walk and are using wheel chairs exert great amounts of energy using physical strength to turn and steer the wheels. With eyesight being their guide, the disabled would save energy and could use their hands and arms for other activities. There are no products on the market, but there are other applications such as virtual reality using eye tracking to control the vision of the game. Eye tracking is not heavily used in mainstream products but are beginning to pick up as input to electronics become more and more natural. The purpose of this project is to develop a wheelchair that will be controlled by the eyes of the person seated in the wheelchair. This will allow people without full use of their limbs the freedom to move about and provide a level of autonomy. The project will consist of three main parts. The first part is the head mounted camera and laptop system that will track the camera wearer's eyes. The camera will take an image of the eyes that will be sent to the laptop where the images will be processed using the open source image processing software OpenCV. Once the image has been processed it moves onto the second part, our microprocessor. The microprocessor will take a USB output from the laptop and convert the signal into signals that will be sent to the wheelchair wheels for movement. Also, the pressure and object detection sensors will be connected to our microprocessor to provide necessary feedback for proper operation of the wheelchair system. The final part of the project is the motor drivers to interface with the wheelchair itself. There will be two motor drivers for each motor on the wheelchair both left and right. Each motor driver will consist of an h-bridge that will power the motor depending on the output of the microprocessor. The motor drivers will control both speed and direction to enable the wheelchair to move forward, reverse, left, or right.