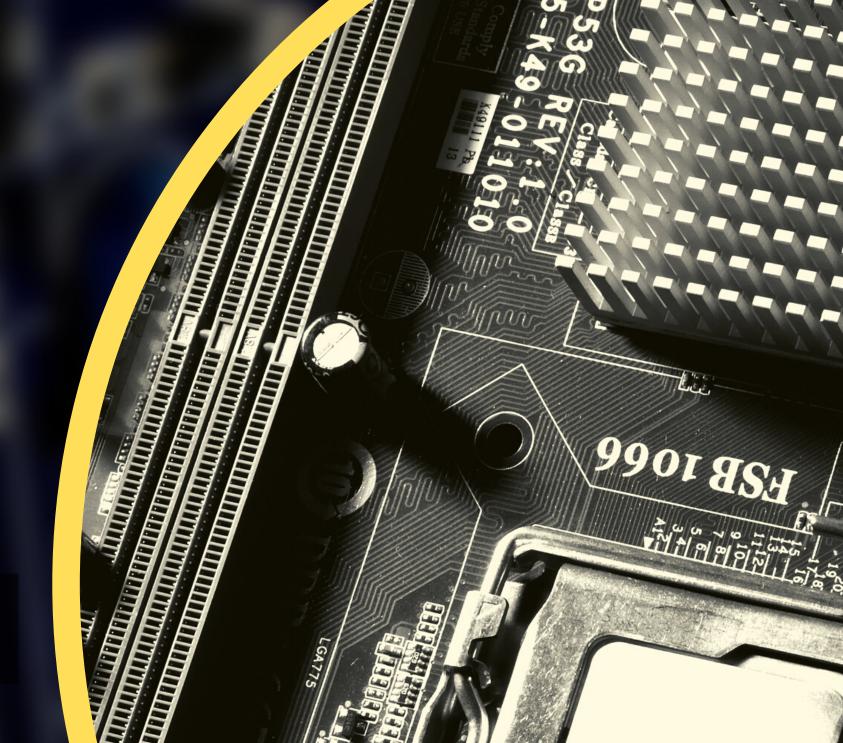






# INSTRUMENTATION AND CONTROL DEPARTMENT



ISSUE - VII

JULY - DECEMBER 2022



#### DR. SWETA P. DAVE

PRINCIPAL GOVERNMENT ENGINEERING COLLEGE, GANDHINAGAR.

As the principal of this esteemed educational institute, I welcome you to have a sneak peek on the latest edition of news-letter of I.C. Department. I am overjoyed to share my words; GEC Gandhinagar entity is committed to provide high-quality education and to organize best cha-

cracter development events. This daunting journey has never been easy for any student and it never will be; hence our faculties and staff members are working tirelessly to make this journey smooth. To give the students best knowledge and to make them ready for the outsided competition has always been institute's top priority. The designing team has played an inevitable role to convey my words to you. I appreciate the team and staff members for their time, energy & hard work. I wish everyone to unleash all their capabilities to achieve success.



#### DR. NARENDRA K. ARORA

H.O.D., I & C GOVERNMENT ENGINEERING COLLEGE, GANDHINAGAR.

It feels great to publish our 7th edition of newsletter. GEC gandhinagar has always been a prestigious institute when it comes to engineering. I am grateful that I got a chance to work here and help many young

engineering talents. The institute has always been working in direction of student's career and overall development. It is matter of proud that we have made so many young and professionally trained engineers. All the faculty members and staff are heartily welcomed for their enormous assistance. We will push all our limits to encourage and nourish these young talents. I wish all the best to every student for their academic career.

# DEPARTMENT INSTRUMENTATION AND CONTROL

THE INSTITUTION THE FACULTY THE DEPARTMENT **DEPARTMENTAL ACTIVITIES** IN THIS **STUDENT FACULTY ACHIEVEMENTS** CONTRIBUTION THE **PLACEMENT** 













# THE INSTITUTION

## VISION

• To be a premier engineering institution, imparting quality education for innovative solutions relevant to society and environment.

## MISSION

- To develop human potential to its fullest extent so that intellectual and innovative engineers can emerge in a wide range of professions.
- To advance knowledge and educate students in engineering and other areas of scholarship that will best serve the nation and the world in future.
- To produce quality engineers, entrepreneurs and leaders to meet the present and future needs of society as well as environment.

# THE DEPARTMENT

## VISION

• To impart quality education in Instrumentation & Control engineering through innovation to meet technological challenges of industries and society with environmental consideration.

## MISSION

- To impart knowledge about present trends in the field of Instrumentation & Control engineering.
- To train competent Instrumentation & Control engineers who can design, operate process instrumentation and also manufacturing an automation systems in industries.
- To encourage students to work on innovative research projects related to Instrumentation & Control engineering considering environmental aspect.

#### PEO

Program Education Objective statements

- To operate and maintain industrial Instrumentation & Control system.
- To design Industrial Instrumentation & Control system by innovative approach.
- To inculcate professional and ethical attitude, effective communication skills, multidisciplinary approach and an ability to relate Engineering issues in social and environmental context.
- To acquire the ability for life-long learning needed for a successful professional career.

## **PSO**

Program Specific Outcome

- Design and develop solutions for process control and automation industries and able to pursue career in research, industry, higher studies and adapt to changing technology.
- Able to understand professional and ethical responsibility with effective communication skills and life-long learning.

# THE FACULTY

### TEACHING STAFF DETAILS



PROF. M.R. JANI

**DESIGNATION**: Associate Professor

QUALIFCATION : ME(IC)

**EXPERIENCE** : 27 YEARS 6 MONTHS



DR. S. A. RANKAWAT

**DESIGNATION**: Associate Professor

QUALIFCATION : PHD

**EXPERIENCE** : 27 YEARS 6 MONTHS



DR. D. H. SHAH

**DESIGNATION**: Associate Professor

QUALIFCATION : PHD

**EXPERIENCE** : 23 YEARS 6 MONTHS



PROF. A. D. RATHOD

**DESIGNATION**: Associate Professor

QUALIFCATION : ME(IC)

**EXPERIENCE** : 22 YEARS 6 MONTHS



PROF. M. B. HINGU

**DESIGNATION** : Assistant Professor **QUALIFCATION** : M.TECH., SYSCON-IITB

**EXPERIENCE** : 25 YEARS 6 MONTHS. 01 YEARS IMDUSTRY



Prof. I. U. Ajmeri

**DESIGNATION**: ASSISTANT PROFESSOR

QUALIFCATION : ME(IC)

**EXPERIENCE** : 24 YEARS 6 MONTHS

# THE FACULTY....



#### PROF. K. C. DAVE

DESIGNATION : ASSISTANT PROFESSOR
QUALIFCATION : M.TECH (E AND TC)
EXPERIENCE : 13 YEARS 6 MONTHS



#### PROF. K. K. ACHARYA

**DESIGNATION**: Assistant Professor

QUALIFCATION : ME(IC)

**EXPERIENCE** : 22 YEARS 6 MONTHS. 02 YEARS IMDUSTRY



DR. K. B. PATHAK

**DESIGNATION**: Assistant Professor

QUALIFCATION : PHD

**EXPERIENCE** : 18 YEARS 6 MONTHS



#### Prof. K. S. Vashishtha

**DESIGNATION** : Assistant Professor

QUALIFCATION : ME (IC)

**EXPERIENCE** : 12 YEARS 6 MONTHS



#### PROF. N. V. PATEL

**DESIGNATION**: Assistant Professor

QUALIFCATION: ME(IC)

**EXPERIENCE**: 11 YEARS 6 MONTHS OF TEACHING. 05 YEARS

**INDUSTRY** 



#### PROF. P.N. PATEL

**DESIGNATION**: Assistant Professor

QUALIFCATION : ME(IC)

**EXPERIENCE** : 08 YEARS 6 MONTHS



#### PROF. R.S. RANA

**DESIGNATION**: Assistant Professor

QUALIFCATION: M.TECH (IC)

**EXPERIENCE**: 06 YEARS 6 MONTHS

# THE FACULTY....



#### PROF. R.L. ZADFIYA

**DESIGNATION**: Assistant Professor

QUALIFCATION: M.TECH (IC)

**EXPERIENCE** : 12 YEARS 6 MONTHS



#### PROF. A.N. BOKADE

**DESIGNATION**: Assistant Professor

QUALIFCATION : ME(IC)

**EXPERIENCE** : 17 YEARS 6 MONTHS



#### PROF. J.J. SHAH

**DESIGNATION**: Assistant Professor

QUALIFCATION : ME(IC)

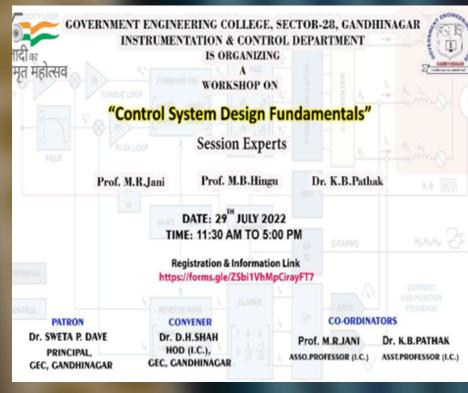
**EXPERIENCE** : 06 YEARS 6 MONTHS

## DEPARTMENTAL

## ACTIVITIES

• GEC Gandhinagar, Department of Instrumentation & Control, organized a One day workshop on "Control System Design Fundamentals" on 22nd and 29th July 2022. Prof. Manish R. Jani (Associate Professor, IC Dept), Prof. Mukesh B. Hingu (Assistant Professor, IC Dept) and Dr. Kalpesh B. Pathak (Assistant Professor, IC Dept) had conducted the sessions. This workshop covered modern control theory using state-space analysis and compensation in both time and frequency domain. Hands-on sessions were planned for case studies with industrial applications. Tools used for hands-on practice were MATLAB and SCILAB. More than 60 students of all branches actively participated in this event.









• Industria visit was planned for semester 7 students at IACE(International Automobile Centre Of Excellence), at IACE, Raysan Road, Knowledge Corridor, Gandhinagar, on 26/08/2022 (Friday). Students visited vehicle system labs, manufacturing workshops and electronics labs. This centre hosts the latest technology across the automotive systems & manufacturing process.

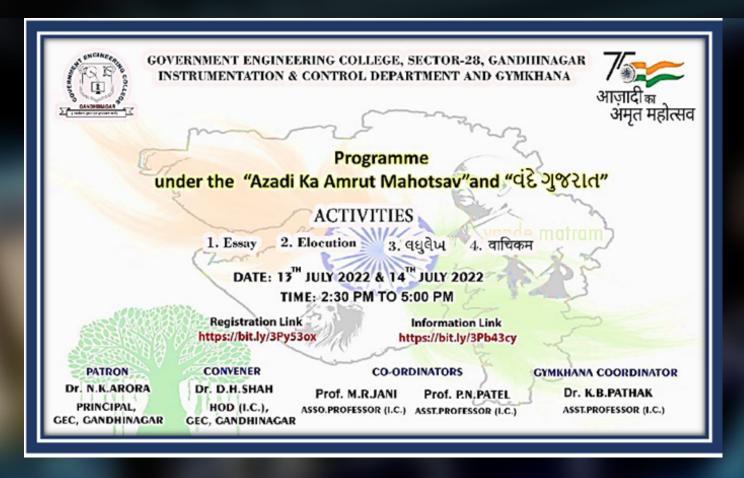






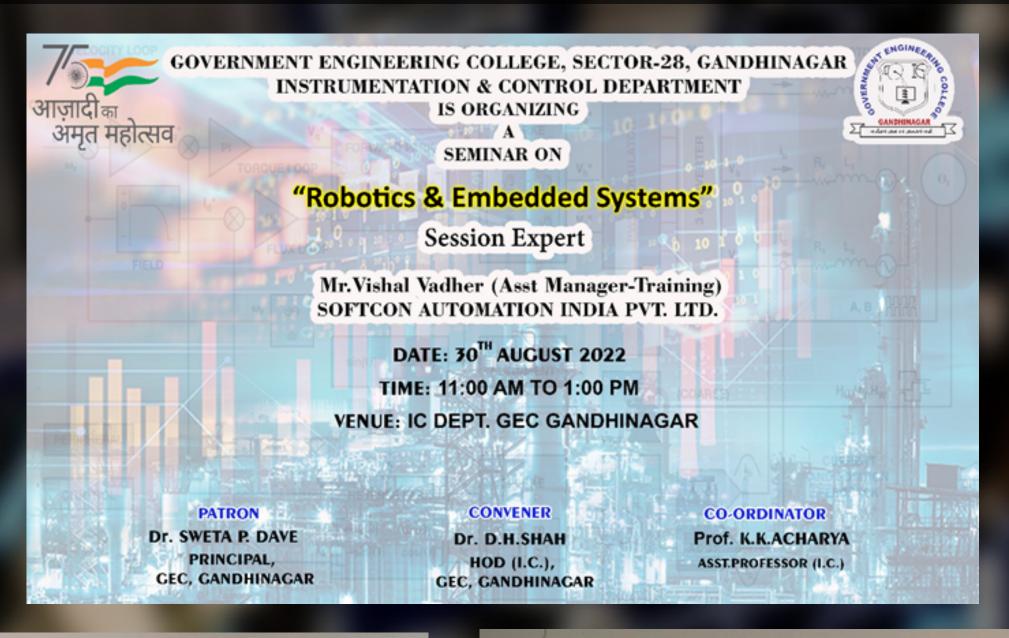


• Vande Gujarat event was planned and organized to celebrate the foundation day of our state Gujarat and to express gratitude to our state for being prime contributor in the progress of nation. Instrumentation & Control department jointly organized Vande Gujarat programme with Gymkhana for the students of all the branches of institute, on 13th & 14th July 2022. Event was organised as a part of celebration of Azadi Ka Amrut Mahotsav with participation of students in activities like Article writing, बधुबेખ, वाचिकम्, short story writing and digital poster making.





• A seminar on "Robotics & Embedded System" was planned by the IC department for 3rd and 4th year students, on 30/08/2022. Mr. Vishal Vadher (Assistant Manager-Training) was the session expert from SOFCON Automation India Pvt. Ltd., Ahmedabad.







• Pedagogical Session on "NBA CO-PO attainment" was planned on O6/08/2022. Faculties/experts from Metallurgy department had conducted the session.

# DEPARTMENTAL

## ACTIVITIES ....

• A seminar on "Robotics & Embedded System" was planned by the IC department for 3rd and 4th year students, on 30/08/2022. Mr. Vishal Vadher (Assistant Manager-Training) was the session expert from SOFCON Automation India Pvt. Ltd., Ahmedabad.



 Pre-placement talk for final year students was organized by IC department on 09/09/2022. Experts from V.B. Tech. Automation, Ahmedabad had conducted the session.





# DEPARTMENTAL

## ACTIVITIES ....

• An orientation program was organized by the IC department for the first year admitted students of Instrumentation & Control branch and Robotics & Automation branch, on 09/09/2022.











• A pedagogical session was conducted by Prof.(Dr.) C. B. Bhatt, Principal, GMCA, Ahmedabad, on 26/09/2022. Mission-Vision, PEOs & PSOs of the IC department were reviewed and suggestions were given.





 ISA students chapter of IC department had organized a seminar on "Industrial Automation & Operational Management", date: 27/09/2022.
 Mr. Dhruval Chotaliya, CEO, Dwija Inc., was invited as the session Expert.



GOVERNMENT ENGINEERING COLLEGE, SECTOR-28, GANDHINAGAR

INSTRUMENTATION & CONTROL DEPARTMENT





ISA Students Chapter Organizes a Seminar

"Industrial Automation & Operational Management"

Expert Speaker : Mr. Dhruval Chotaliya

CEO, Dwija Inc.

Date : 27 September, 2022 Time: 1.30 PM Onwards

Venue: Room No. 2111

PATRON Dr. SWETA P. DAVE PRINCIPAL

GEC'Gn

Dr. N. K. Arora HOD (IC Dept.)

ISA Mentor Dr. S. A. Rankawat

(IC Dept.)

Prof. K. K. Acharya (IC Dept.)

• An Alumni meet was organized by IC department on 01/10/2022. Mr. Tejas Trurakhiya, Mr. Nirmal Mehta & Mr. Tejas Prajapati were invited as guest alumni speakers.

Government Engineering College, Sector-28, Gandhinagar Instrumentation & Control Department



Alumni Meet Oct-2022



**Guest Alumni Speakers** 



Tejas Turakhia



Nirmal Mehta



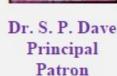
Tejas Prajapati

Expert Session: 11:00 am to 1:00 pm

Cultural Event: 4:00 pm to 7:00 pm

1<sup>st</sup> Oct-2022 Venue : 2101, IC Department







Dr. N. K. Aror HOD (IC) Convener



Dr. I.B. Dave Chairman Alumni Asso.

CO-ORDINATORS: Prof. K C DAVE & Prof. K B PATHAK



 As a part of celebration of Indian Constitution Day, a pledge was taken by the students and the faculties of the department on 25/11/2022.





• An expert talk on "Role of Instrumentation and Control Engineering in the Industries" was arranged by the department for I.C. students on 23/12/2022. The session expert was Mr.Pankaj Nandasana, Head of the Department, Oilserv Ltd., Dubai.





 A pedagogical session on "Meditation Techniques" was conducted by Prof.(Dr.) K. B. Pathak in IC department, on 31/12/2022. In this session, proper way of doing meditation and its benefits were discussed among the IC faculties.



## FACULTY CONTRIBUTION

- Prof. K. K. Acharya has completed the Innovation Ambassador training 'Foundation Level' (Total 15 sessions of 30 contact hours), conducted in online mode by MoE's innovation Cell & AICTE on 25/08/2022.
- Prof. M. B. Hingu has completed NPTEL-AICTE MOOC Faculty Development Program on "Introduction to Internet of Things".
- Prof. Kapil C. Dave has completed NITTTR SWAYAM online 2 credit FDP program on "Professional Ethics for Higher Education Teachers".
- Prof. Pradeep N Patel has completed a Faculty Development Program on "Governance and management of institutions" at NITTTR, from 29-08-2022 TO 02-09-2022.
- Prof. Aarti Bokade has completed a MOOC course on "Soft Skills" (Organized by NPTEL-AICTE Faculty Development Program)-July-Oct-2022.
- Prof. Niyat V Patel has completed FDP under MOOC on "Python for Data Science" during July-Aug 2022.
- Prof. Jheel J. Shah has completed NITTTR SWAYAM online 2 credit FDP program on "Professional Ethics for Higher Education Teachers".
- Prof. Mukesh B. Hingu has completed FDP under MOOC -NPTEL on "Introduction To Internet Of Things" during July-OCT 2022
- Prof.(Dr.) Kalpesh B. Pathak has completed FDP under MOOC -NPTEL on "Introduction to Industry 4.0 and Industrial Internet of Things" during 25-07-22 to 14-10-22 (Achieved rank in Top 1%, Received Topper Certificate).
- Prof. Keerti S. Vashishtha has completed NITTTR SWAYAM online 2 credit FDP program on "Professional Ethics for Higher Education Teachers".

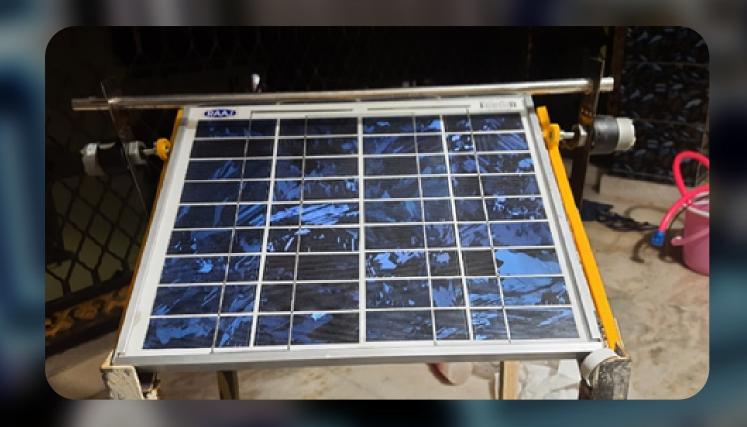
## FACULTY CONTRIBUTION....

# FACULTY PAPER PUBLICATIONS:

 Prof.(Dr.) S.A Rankawat has Published a Journal paper in Physiological Measurement (highly indexed journal- impact factor: 2.688) "An empirical study of modified beat SQI based majority voting fusion method for heart-rate estimation in noisy multimodal cardiovascular signals". Physiological Measurement, Volume 43, Number 12 Citation Shalini A Rankawat 2022 Physiol. Meas. 43 128001DOI 10.1088/1361-6579/ac9bc8

# STUDENT ACHIEVEMENTS

## **DESTEX PROJECT**





• Cleanliness of solar panels is a major problem in industries as well as residential areas. The project's main intention is to develop an automated system which can clear every type of solar panels at a single press of button.

"We had many problems while developing the system. But with immense support of faculties and hardwork we were able to make it with ease."

- TEAM DESTEX

Team Details (Sem 5 - IC Students ):

Manav Bhatt (Team Leader) Smit Kambli (Technical designer)

Vivek Kumar (Research head) Kunal Sharma (Mechanical Head) Mudaliar Dhananjay (Technical designer)



### JANMESH CHOKSHI SEM-3

As e-commerce has been my area of interest, I decided to take a course on e-commerce fundamentals. It really turned out well and gave me more deeper knowledge into the field

# STUDENT ACHIEVEMENTS....

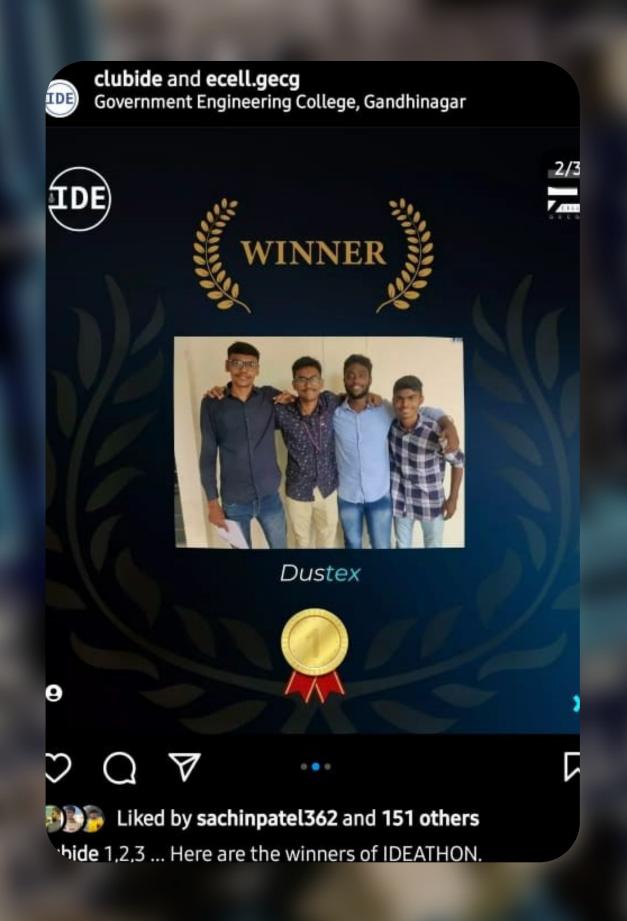


Harsh Vadher and Tejasvini
Yadav, Semester-5 Students
(both founder members of
their start up: "Halostringers")
were felicitated by
PGVCL(Paschim Gujarat Vij
Company Limited). In demo day
of PGVCL organized on 14-092022, they got 3rd rank and
their product String Fuze
Detector got third prize. Their
start up is mentored at
Government Engineering
College, Gandhinagar and iHub



Shreya Yadav has attended 2 days workshop, from 14th to 15th October 2022, where she learned about the importance of manufacturing practices, various ways and methods of building miniaturised objects and it's applications in computer technology, electronics and in medical domain.

# STUDENT ACHIEVEMENTS....



Kunal Sharma, Manav
Bhatt, Mudaliar
Dhananjay, Smit Kambli
and Vivek Kumar
(Semester-5 I.C.)
participated in National
Level Hackathon and
won Ideathon organized
by Government
Engineering College,
Gandhinagar





Pathan Yasharkhan Enrollment No -200130117003 (Sem-5), member of GRC(GTU ROBOTICS CLUB) worked as an operator of Robot R2 in the event conducted on July 16, 2022 at DD ROBOCON in Tyagraj stadium New Delhi. The team achieved Visvesvaraya Design Award for the best robot design. Harsh Sharma, Jay patil and Urvish Shah of Sem-7 were also the part of the team.

# THE PLACEMENT

The Training and Placement Cell of the department facilitates the process of placement of students graduating from the institute besides collaborating with leading organizations in setting up internship programs for the students. The Cell provides the infrastructural facilities to conduct pre-placement talks, online and written aptitude tests, group discussions, and interviews.

## Our Major Recruiters (July 2022-Dec 2022):















## **The Placement Glimpses**

Government Engineering College Gandhinagar Instrumentation and Control Engineering



Darshil Patel



Darshan Panchal



**Urvit Patel** 



Shivam Parmar



- For Being Placed in -

CONGRATULATIONS





Akhil Alagiya

With package of 7.5 LPA

# THE PLACEMENT....

#### Government Engineering College Gandhinagar Instrumentation and Control Engineering



Parth Makwana



Ritesh Patle

CONGRATULATIONS



**Vedant Panchal** 



Namrata Tiwari



Bhawya Saxena



Devendra Prajapati



Vinisha Fatania



Dhruvrajsinh Piludariya



Deepali Saini

- For Being Placed in -

adani

With package of 6.5 LPA

## Government Engineering College Gandhinagar Instrumentation and Control Engineering



Vikas Sachan



Nishtha Acharya



Ajay Maurya

#### CONGRATULATIONS

- For Being Placed in -



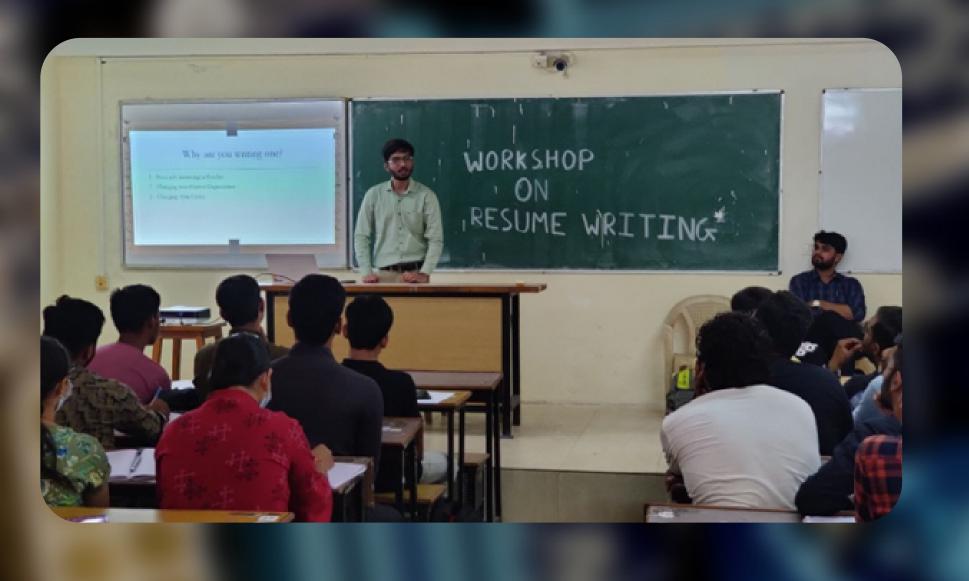
The students have been offered the highest package of 7.5 LPA and an average package of 3.5 LPA. The department congratulates the selected students at this moment and extends best wishes for their future ventures.

# THE PLACEMENT....

## The Placement Cell EVENTS

The Training and Placement Cell of Instrumentation & Control Engineering organized MOCK placement sessions for pre-final and final year students to make them prepared and organized for the interview process. The Mock sessions were conducted by our Alumni experts to address the pre-final and final-year students about Resume Writing and Interview Skills.

How to prepare their resumes (Session-1), was conducted on 30th July, 2022 by our Alumni, Mr. Akshay Chaudhary and Mr. Jigar Bhatt.







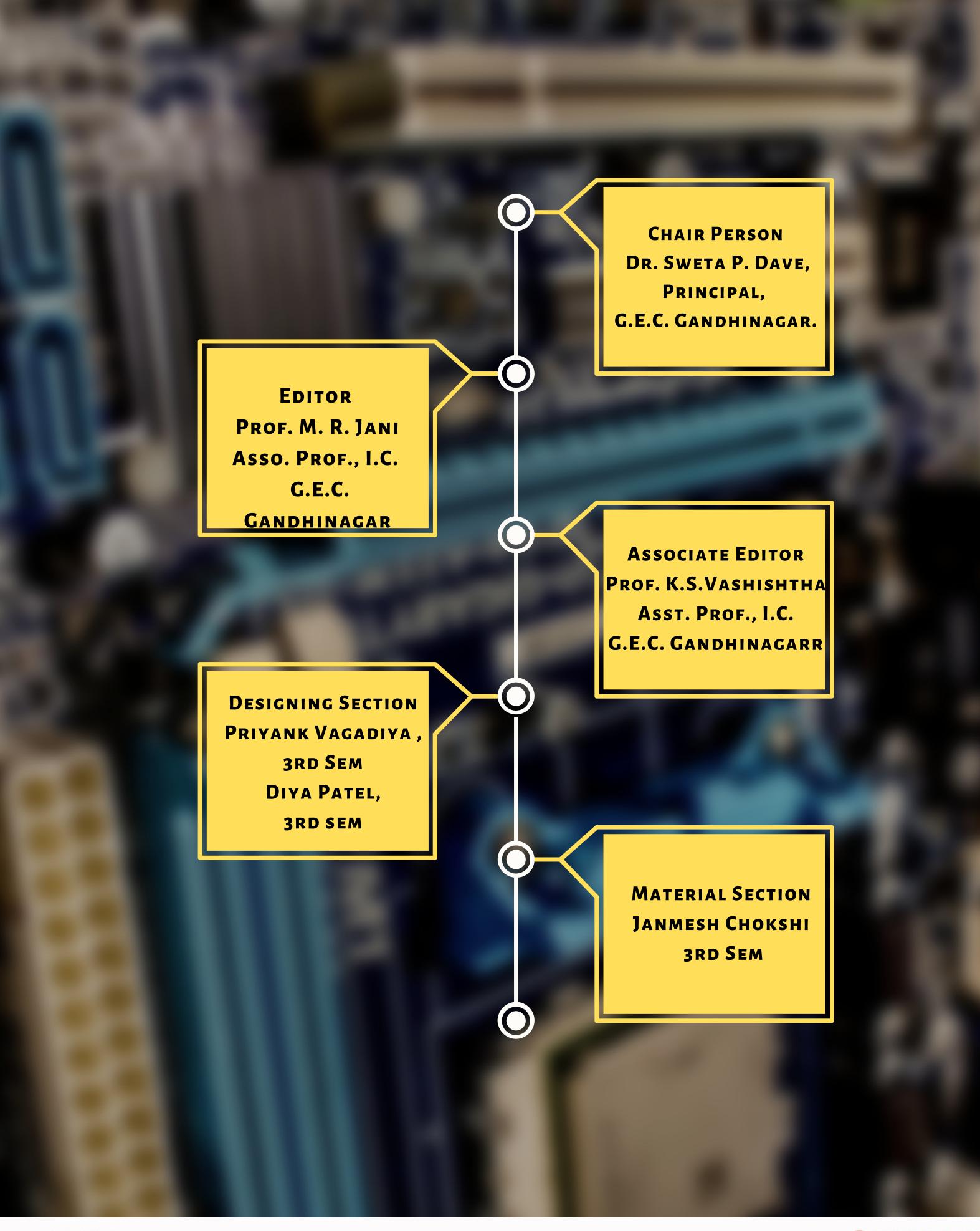
# THE PLACEMENT....

Interview Skills (Session-2) was conducted on 3rd Sept., 2022 by our Alumni Mr. Ashutosh Agrawal















Nr.Animal Vaccine Institute, Sector-28, Gandhinagar, Gujarat-382028