



## DEPARTMENT OF INSTRUMENT AND CONTROL ENGINEERING L.D COLLEGE OF ENGINEERING, AHMEDABAD

EDITION 6.0  
JAN'21 - JULY'21

DEPARTMENT OF IC ENGINEERING NEWSLETTER



### *Principal Message*



#### **Dear Students and Faculty Members,**

The year began on a note of hope and fulfillment with the celebration of the Kite festival by the Umeed fest. We celebrated the 72nd Republic day with all the grandeur and responsibility while observing the Covid19 protocol. Further, in the academics and research areas, various departments organized online webinars, FDPs, published 22 research papers and 16 faculty members delivered expert lectures. The progress of the SSIP cell is rewarding in itself as we filed and published 03 patents, 03 research projects received grants and one of our research projects was awarded by GTU. All of us are facing academic challenges during these tough times and I am glad to inform you that we are not only supporting the students in academics, but

we have also extended help and support to those in need due to COVID.

Department of IC Engineering faculty and students are putting great efforts in teaching-learning in the COVID Pandemic, during this duration dept. student and faculty published one patent and one patent also granted, online placement, Industrial training record is also noticeable, students took an online summer internship in various domains and enhance their skills, Department is also going for NBA(National Board of Accreditation) I congratulate all students and faculty for their efforts and best wishes for NBA. At the end on a note of hope for a better tomorrow for all of us.

*Dr. R.K. Gajjar ,  
Principal, LDCE.*

### *Vision and Mission of Institute*

**Vision :** To contribute for sustainable development of nation through achieving excellence in technical education and research while facilitating transformation of students into responsible citizens and competent professionals.

**Mission :**

- To impart affordable and quality education in order to meet the needs of industries and achieve excellence in teaching-learning process.
- To create a conducive research ambience that drives innovation and nurtures research oriented scholars and outstanding professionals .
- To collaborate with other academic & research institutes as well as industries in order to strengthen education and multidisciplinary research.
- To promote equitable and harmonious growth of students, academicians, staff, society and industries, thereby becoming a center of excellence in technical education.
- To practice and encourage high standards of professional ethics, transparency and accountability

#### **INSIDE THIS ISSUE:**

- Principal Ma'am Message
- HOD Sir's Message
- Major Events
- Webinars
- Students Achievements
- Paper Publication
- ME Dissertation
- Creativity by Students
- Alumni Profile

## *Message From Head of Department*

### EDITORIAL



Season's Greetings..!!!

It is indeed a pleasure for me to write editorial for the IC Engineering department newsletter. Department is progressing day by day under able leadership of Dr. R.K. Gajjar – Principal, LDCE, dedicated and committed team of IC Engineering faculties as well students.

In COVID 19 pandemic has hastened the entire teaching-learning ecosystem, but it has also marked an increase in resilience in students and faculty community. All the people associated have tried a lot to bridge the gap between the online and offline education. It has showed us a new way of working and coping up with stuffs, the department activities in the newsletter shows that In spite of pandemic department students and faculties had put efforts in teaching learning process to overcome of limitation of pandemic.

The major events in the current issue of newsletter are online final year project demonstration and competition event kaizen 2k21, 23 projects presented their working demo/simulation results to experts, 3 best projects awarded as winner. From the desk of ISA LDCE students section happy to share that this time once again our two students Utsav Panchal and Vishal Yadav got PMDC scholarship of total worth 2150 \$. At department we also encourage to take student at filed visit which help them to correlate their theoretical knowledge with real time experiments. Due to COVID this time we had conducted online Industrial Training with Axis Automation solution and alumni of department for our 8 students. The Department is facilitated with highly qualified and committed faculty members and they are upgrading their knowledge by attending various training as well utilizing various online tools, I am happy to share that L&T had donated one smart class room with audio visual facility to IC Department, we are sincerely acknowledging their support for students development activities. Faculty and students untiring efforts results to win various awards in technical and non-technical competition.

Placement is also getting online and this time in 2021 batch students 25 got placed and placement is still continuing. Students are placed in highly reputed core companies and public sector units. At last would like to give my message with the quotes of Charles Darwin "It is not the strongest of the species that survives, nor the most intelligent; it is the one most adaptable to change." We learn lots of from pandemic and continue to learn for betterment of society.

**Dr. Manish Thakker**  
**Professor, Head**

### *Department Vision and Mission*

**Vision :** Provide quality education and research environment for preparing competent Instrumentation and Control engineers to meet the technological challenges of industries and the society.

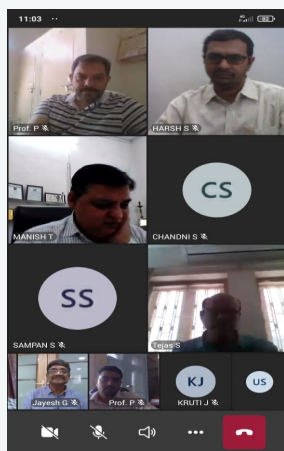
**Mission :**

- To impart quality education in the field of industrial automation to match the needs of industries.
- To encourage multi disciplinary research and innovative projects.
- To cultivate technocrats and entrepreneurs with professional skills and ethics.

## KAIZEN 2021

The online Kaizen 2021 for Instrumentation & Control Engineering Department was conducted with 3 expert Jury member (Dr. C. B. Bhatt (Principal MCA college- Maninagar), Dr. Suryakant Gupta (Scientific Officer –G, FCIPT Gandhinagar) and Mr. Jitendra Gajjar(Director Amee Power) reviewing all the teams of final year IDP/UDP projects on date of 19th April, 2021 through Microsoft team. As per the Panel reviewers, total 3 Innovative Projects were selected out of 21 UG Projects.

Sr. no	Student's Name	Faculty Name	Title of Innovative Project
1.	Shah Jinay, Mistry Jay, Thakor Suresh	Prof. D. V. Raninga	Underwater Inspection Vehicle-1.0
2.	Senjaliya Janesh, Parmar Nikunj, Patel Maulik, Chaudhary Jay	Prof. V. V. Patel	Plastic detection and separation.
3.	Panchal Shalin, Dubal Janvi, Singh Shaifali, SorathiyaMansi	Prof. L. S. Patel	Portable Density meter with temperature and humidity sensor.



## FINAL YEAR PROJECTS

Sr.no	Project Title	Team Leader	Internal Guide
1.	Robotics and Automation	Shah Jinay	Prof. D.V.Raninga
2.	Data Acquisition and Processing	Surti Darshan	Prof. D.V.Raninga
3.	Advanced Footstep Power Generation	Prajapati Khushali	Prof. U.V.Suhagiya
4.	Robust PID Control of Single Tank System	Bharmal Burhanuddin	Dr. A.K.Shah
5.	Advance Data Logger with Solar Panel Cleaning System	Oza Vishesh	Dr. M.T.Thakker
6.	Advance Process Control System	Shah Tanay	Dr. A.K.Shah
7.	Liquid Mixing and Bottle filling using PLC with SCADA	Manani Payal	Prof. K.R.Joshi
8.	Plastic Detection and Separation	Senjaliya Janesh	Prof. V.V.Patel
9.	Smart Green House over IOT Platform	Devani Pragmesh	Prof. V.V.Patel
10.	IOT Based Automation	Sonara Ravikumar	Prof. M.C.Patel
11.	Voice Controlled Forklift	Parmar Rony	Prof. L.S.Patel
12.	Machine Monitoring System	Vegad Ajay	Prof. C.V.Shah
13.	Automatic Industrial Parameter Control using PLC with Bluetooth Device	Makwana Mitesh	Prof. H.K.Shahtri
14.	Smart Water Parameters Monitoring System	Bhabhor Jaydeep	Prof. C.V.Shah
15.	Object Distribution	Choudhary Sunny	Prof. H.K.Shahstri
16.	Multi-channel Temperature Measurement and Control using PID Control	Lakkad Nilay	Prof. V.P.Patel
17.	Development of PLC using Arduino Controller and MATLAB Simulink	Tadavi Hiteshkumar	Prof. S.N.Shah
18.	IOT Based Smart Parking System	Chondagar Dishant	Prof. S.N.Shah
19.	Peltier Air Cooler	Parekh Jinal	Prof. N.A.Kanani
20.	Portable Denisty meter with Temperature and Humidity Measurment	Panchal Shalin	Prof. L.S.Patel
21.	ATM Security System	Rathor Hariom	Prof. S.N.Shah

## PLACEMENT OF IC ENGG , 2021 BATCH

INSTRUMENTATION & CONTROL ENGG.- PLACEMENT 2021		
Sr. No	Name of Students	Company
1	CHONDAGAR DISHANT	TCS
2	DALMIA YASH	TCS
3	PATEL HARSH	TCS
4	PATEL MAYANK	TCS
5	SENJALIYA JANESH	TCS
6	TEJWANI ROHAN	TCS
7	VARU SANJAYKUMAR	TCS
8	BHARMAL BURHANUDIN	AARTI INDUSTRIES
9	KHATRI MAYANK	AARTI INDUSTRIES
10	PANCHAL SHALIN	AARTI INDUSTRIES
11	THAKOR SURESH	AARTI INDUSTRIES
12	MULANI MAULIK	ATUL LTD.
13	ODEDARA PARTH	ATUL LTD.
14	PATNI SHIVAM	ATUL LTD.
15	VEGAD AJAY	ADANI WILMAR
16	SONARA RAVIKUMAR	ADANI GAS
17	SURTI DARSHAN	CAIRN INDIA
18	PAREKH JINAL	CAIRN INDIA
19	SHAH JINAY	CAIRN INDIA
20	SHAIFALI SINGH	EVOSYS
21	LAKKAD NILAY	IRM ENERGY
22	PRAJAPATI KHUSHALI	IRM ENERGY
23	ANINDA ASHUTOSH DEY	LTTD
24	DUBAL JANVI	LTTD
25	SORATHIYA MANSI	WELPSUN



## ACTIVITIES UNDER TRAINING &amp; PLACEMENT CELL

## TCS - ILLUMINATE PROGRAM



It was a 3 days Program on virtual platform from the date July 06, 2021 to July 08,2021 for the students of L. D. College of Engineering of batch 2022 for their upcoming career opportunities.

## Speakers List:

Day 1: Mr. Gaurav Ghelani

Day 2: Mr. Dhawal P.

Day 3: Ms. Sonali Tripathi

## Eligibility Criteria

Qualifications- B.E/ B.Tech/ M.E/ M.Tech/ M.Sc/ MCA graduates

Process: TCS National Qualifier Test > Interview > TCS Offer

- Eligible Streams:
  - UG/PG - All Engineering Streams
  - M.Sc - Computer Science & Information Technology and related streams
- % Criteria - 6 CGPA or 60% throughout Academics in X/XII/UG/Diploma/PG
- Compartmental - Compartmental allowed in X/XII only if first attempt with compartmental is above 6 CGPA or 60% and cleared in the subsequent attempt
- Reattempt - Reattempt in X/XII not allowed if first attempt is less than 6 CGPA or 60%
- Backlog Criteria - 1 Active Backlog at the time of appearing for the Exam
- Gap Criteria - Overall Gap in Academic Career not to exceed 2 years
- Extended Education - No extended education allowed in highest qualification

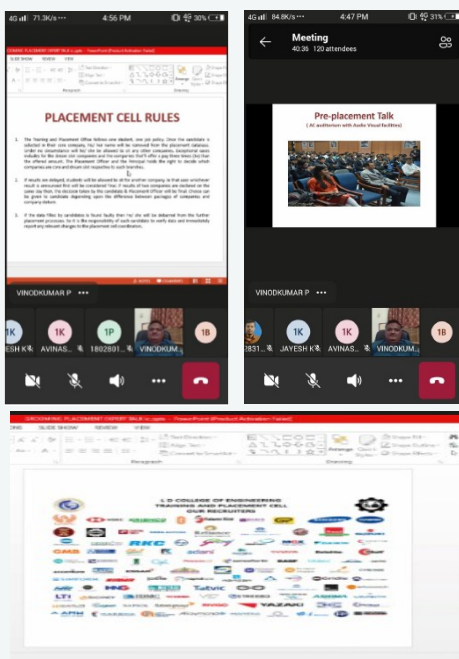
TCS would be doing Eligibility Checks at various stages of the selection process. If a student is found to be ineligible at any stage of the process, TCS reserves every right to not proceed with the candidature.



18 | Document Qualifier

Building on belief

## EXPERT TALK ON GROOMING PLACEMENT



The Training and Placement cell of L D College of Engineering organized an Expert talk on Grooming Placement Batch -2022. The talk was held for two days. First talk was on 19th July for Instrumentation and Control Department, Mechanical Department, Chemical Department and Environmental Department and the second talk was on 20th July for The Information and Technology Department, Computer Department, Electronics and Communication Department and MCA Department of L D College of Engineering. For the talk we have our Guest and Speaker Prof. V.P. Patel (M. Tech, IIT Roorkee) and Convener of Placement cell of L D College of Engineering.

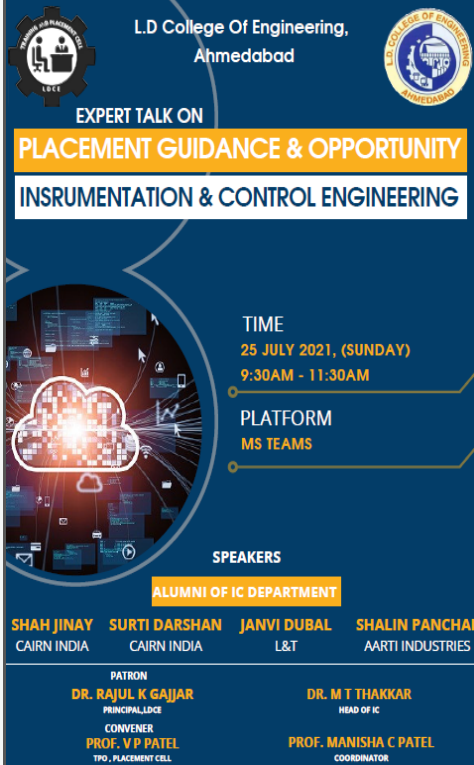
## ALUMNI TALK

## EXPERT TALK ON PLACEMENT GUIDANCE AND OPPORTUNITY

Instrumentation and control engineering department organized the expert talk on “Placement guidance and Opportunity”. Event was conducted online on Micro-soft teams on 25<sup>th</sup> July 2021. Speakers were the alumni's from the 2021 batch. The basic objective of this event was to guide student about Placements preparation.

Speakers List:

- Jinay Shah (Cairn India)
- Mayank Patel (Cairn India)
- Yash Dalmia (Cairn India)
- Janvi Dubal (L&T)
- Aninda Dey Sarkar (L&T)
- Shalin Panchal (Aarti Industries)
- Burhanuddin Bharmal (Aarti Industries)



L.D College Of Engineering,  
Ahmedabad

EXPERT TALK ON  
**PLACEMENT GUIDANCE & OPPORTUNITY**  
INSRUMENTATION & CONTROL ENGINEERING

TIME  
25 JULY 2021, (SUNDAY)  
9:30AM - 11:30AM

PLATFORM  
MS TEAMS


SPEAKERS  
ALUMNI OF IC DEPARTMENT  
SHAH JINAY SURTI DARSHAN JANVI DUBAL SHALIN PANCHAL  
CAIRN INDIA CAIRN INDIA L&T AARTI INDUSTRIES

PATRON  
DR. RAJUL K GAJJAR  
PRINCIPAL, LDCE

DR. M T THAKKAR  
HEAD OF IC

CONVENER  
PROF. V P PATEL  
TPO, PLACEMENT CELL

COORDINATOR  
PROF. MANISHA C PATEL



Placement Guidance and Opportunity  
Instrumentation and Control  
Department

Speakers:  
Jinay Shah  
Yash Dalmia  
Janvi Dubal  
Aninda Dey Sarkar  
Panchal Shalin  
Burhanuddin Bharmal

Guided by:  
Dr. R.K.Gajjar  
Principal of LDCE

Dr. M.T. Thakker  
Head of IC Dept.

Prof. V.P. Patel  
TPO, Placement cell

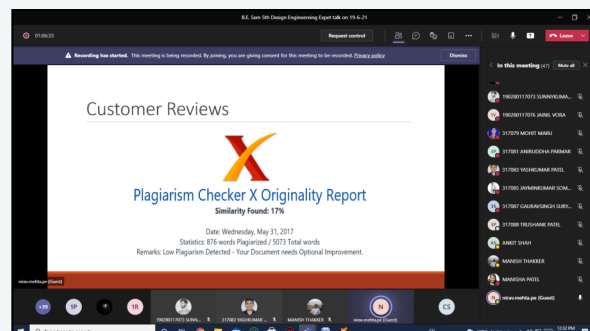
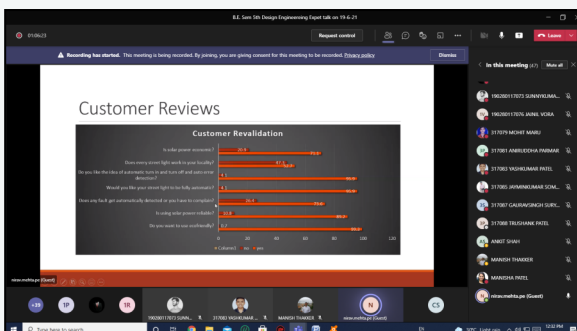
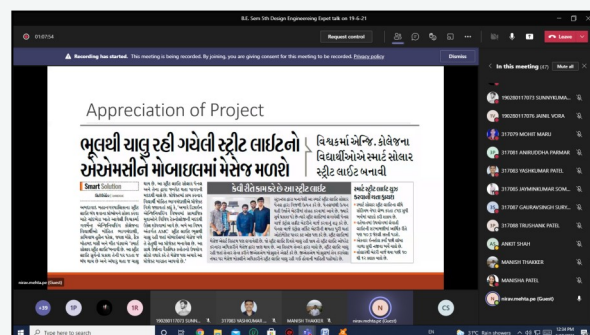
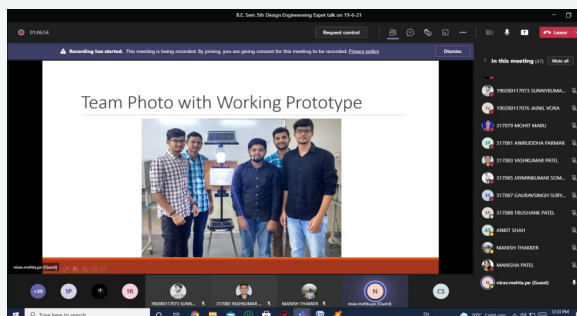
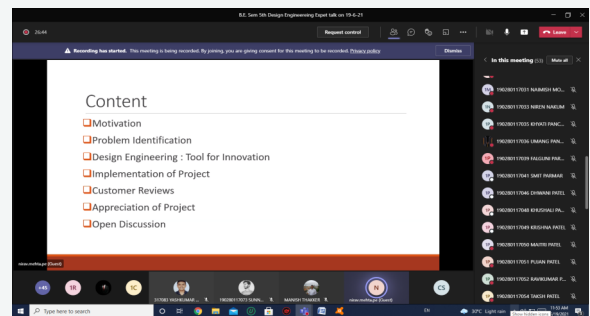
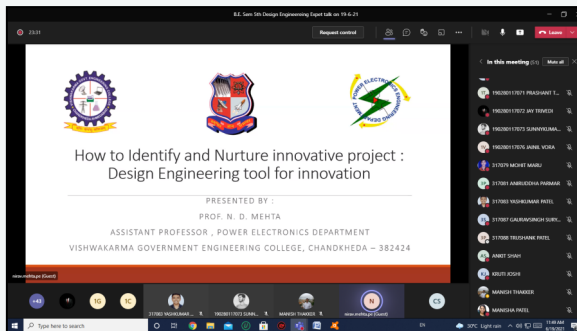
Prof. Manisha Patel  
Coordinataor

Stage	Name of the Stage	What's tested?	# Questions	Duration (minutes)
1	Technical and Aptitude	Logical reasoning, quantitative ability, verbal ability, basic technical knowledge	50 (technical questions were more than aptitude)	60
2	Group discussion	General knowledge and awareness		~10-15
3	Interview	Communication and technical skills. Presentation and confidence is tested by panel members	Varies from candidate to candidate	~20-25

## WEBINAR BY DEPARTMENT

## DESIGN ENGINEERING EXPERT TALK

It was organized on MS Teams platform on June 19, 2021. The session aimed at increasing awareness and engagement in the Design Engineering subject, it really went forward to explain the philosophy of the subject. The expert talk was conducted by Prof. N. D. Mehta, he as an Assistant Professor in Power Electronics Department VGEC, Chandkheda. He further guided the students with how to identify and nurture innovative project: Design Engineering Tools for innovation, Observation, Empathy Canvas, Mind mapping, Ideation Canvas, Product development canvas, learning needs matrix, Prior art search and discussed about problems in current scenario with block diagram, implementation, prototype and customer review. End of session was open for the live QnA in which students had interacted with the expert about their queries related to Design Engineering.

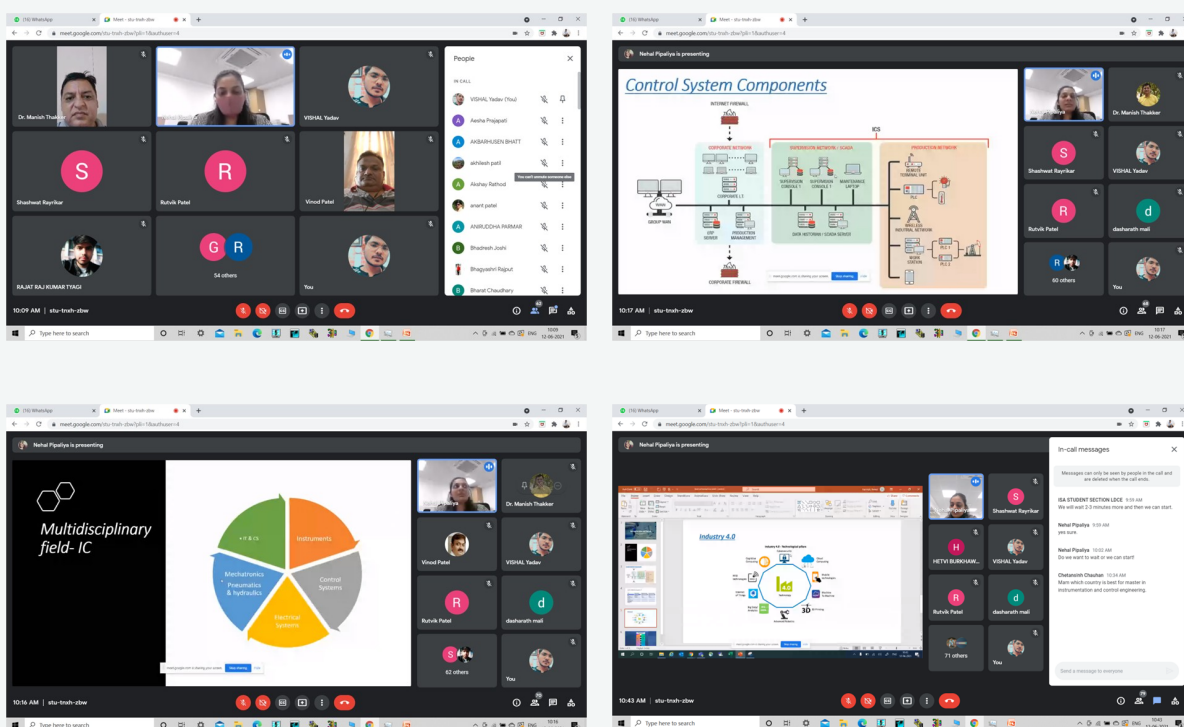




## WEBINARS BY ISA-LDCE

## INDUSTRY NOW &amp; UPCOMING REVOLUTION AND CAREER GUIDANCE

This session was organized by ISA-LDCE on 12th June 2021. In the session, Ms. Nehal shared her professional and personal experience as a control system engineer, further she guided the students with the various career opportunities. She briefly discussed about the how IOT, Robotics, Cyber security and cloud computing are making plant more optimized and efficient in the industry 4.0 revolution. The discussion then proceeded to the role of an automation engineer in Industry 4.0 along with guiding the students that how these demanding skills will be beneficial in their professional career. Finally, she shared her viewpoints on education abroad, the various opportunities and how to make the most out of it. To back it all up, the QnA session enlightened students more about internships and placements and solved the queries of the students.



“AS LONG AS I LIVE, SO LONG DO I LEARN”

- SHRI RAMKRISHNA

## WEBINARS BY ISA-LDCE

## ORIENTATION PROGRAM OF ISA 2021-22

It was organized on July 4, 2021 and aimed at involving and encouraging the students of 2nd year and 3rd year of UG of LDCE to explore and contribute to the domain of automation via this local chapter. The session was organized by the ISA core team. The session expanded on the vision and mission of ISA, the benefits of joining ISA, how it increases awareness and develops one for a career in Automation, the volunteer-ship and scholarship program which is one of the most career shaping opportunity of ISA Student Section.

Attention was also then given to the privileges and details regarding the student membership, the past events and the activities of ISA student chapter, experiences of our Former President Mr. Mayank Patel. To back it all up, the session concluded with the QnA session for all the participants.







L.D COLLEGE OF ENGINEERING  
AND  
INSTRUMENTATION AND CONTROL ENGINEERING DEPARTMENT

INVITES YOU TO

# Orientation Program

OF ISA 2021

DATE: 4TH JULY, SUNDAY  
TIME: 10AM - 11AM  
PLATFORM: MICROSOFT TEAMS

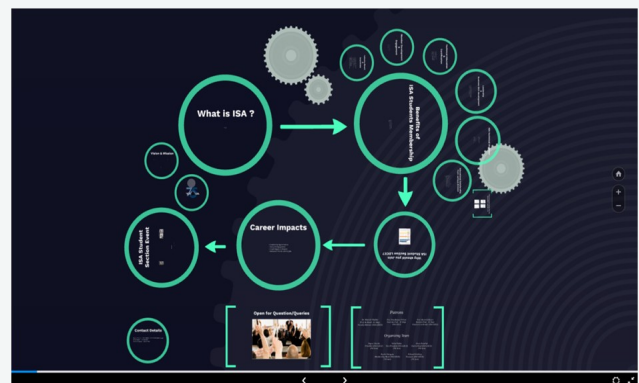
CONTACT DETAIL:  
TAPAN CHAVDA: 6355141049  
VISHAL YADAV: 7573826069







Welcome to  
Orientation Program of ISA - LDCE



**“ BE ACTIVE ! TAKE ON RESPONSIBILITY! WORK FOR THE THINGS YOU BELIEVE IN. IF YOU DO NOT, YOU ARE SURRENDERING YOUR FATE TO OTHERS ”**

**- DR APJ ABDUL KALAM**

## STUDENTS' ACHIEVEMENTS

## ADVANCE DATA LOGGER (PATENT GRANTED)



Patent on ADVANCED DATA LOGGER has been successfully Granted in Indian patent journal.

Application Number- 201921051652

Congratulation to Team leader Vishesh Oza, Team Member Zarana Parekh and Mentored by Dr. Manish Thakker and Prof.V.P.Patel.



At present, the overall efficiency of solar panels is decreased due to dust deposition and bird wastage, so we have tried to solve this problem by using an advanced data logger with a solar panel cleaning system.

## UNDERWATER INSPECTION VEHICLE 1.0 (PATENT PUBLISHED)

Patent on UNDERWATER INSPECTION VEHICLE has been successfully Published in Indian patent journal.

Application Number- 202021011354

Congratulation to Team leader Jinay Shah, Team Member Thakor Suresh, Vyas Dhaval, Dalmia Yash, Surti Darshan, Mistry Jay and Mentored by Prof. Divyesh Raninga.

The present invention relates to a Remotely operated vehicle (ROV) named as Underwater Inspection Vehicle-1.0 which inspects and collects data from water tanks, Industrial fluid tanks, ship hulls, submerged parts of bridges, dams etc. Speed of UIV-1.0 can be controlled underwater for the inspection and data acquisition purpose. Moreover, various sensors are used for accurate movement and precise data collection. These helps to reach places underwater where humans cannot reach or are dangerous for humans. It detects unwanted cracks, objects, mosquito breeding, pollutants, aquatic life etc.

Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India.		INTELLECTUAL PROPERTY INDIA
Application Details		
APPLICATION NUMBER	202021011354	
APPLICATION TYPE	ORDINARY APPLICATION	
DATE OF FILING	17/03/2020	
APPLICANT NAME	1. PROF. DIVYESH RANINGA 2. SHAKHIN KISTUMBAR 3. THAKOR SURESH MAHESHBHAI 4. VYAS DHAVAL BIRSHIBHAI 5. DALMIA YASH SANDEEPRHAI 6. SURTI DARSHAN KALESHIBHAI 7. MISTRY JAY MAHESHIBHAI	
TITLE OF INVENTION	UNDERWATER INSPECTION VEHICLE-1.0	
FIELD OF INVENTION	GENERAL	
E-MAIL (As Per Record)	jinayshah152@gmail.com	
ADDITIONAL E-MAIL (As Per Record)	jinayshah152@gmail.com	
E-MAIL (UPDATED Online)	dhaathah152@gmail.com	
PRIORITY DATE		
REQUEST FOR EXAMINATION DATE	17/03/2021	
PUBLICATION DATE (JUS 11A)	28/05/2021	
Application Status		
APPLICATION STATUS	Application Awaiting Examination	
<a href="#">View Documents</a>		



## STUDENTS' ACHIEVEMENTS



Parth Dave student of 3rd year and cadet in NCC was promoted to Senior Under officer from OC 1 GUJ CTC and NCC LDCE.



## STUDENTS' ACHIEVEMENTS

## ISA PMCD SCHOLARSHIP

The Process Measurement and Control Division (also known as PMCD) is organized within the Automation and Technology Department of ISA. The primary goal of PMCD is to advance the interests and knowledge of its members. PMCD supports its nearly 6,000 members by operating Technical Committees, publishing an industry-specific newsletter and participating with other ISA divisions in technical symposia.

PMCD promotes a highly professional, responsible image of the process measurement and control industry through its various programs and helps its members to develop that image and to succeed in a highly competitive market.

ISA PMCD division every year provides scholarship of up to 2400 \$ to support students financially. Two members of ISA STUDENT SECTION LDCE got ISA PMCD scholarship of total worth 2150 \$.

Setting the Standard for Automation™




June 03, 2021

Dear Yadav Vishal ShivShankar (Gujrat Technological University, Enroll # 190283117015),

It is my pleasure to inform you that you have been selected to receive the prestigious ISA PMCD Scholarship Award for the year 2021-2022. You will receive \$1,400 towards your university tuition/fees.

On behalf of the board, I congratulate you on the achievement and wish you the best in your studies. We highly encourage the recipients to become active members of ISA PMCD and participate in Division activities with utmost dedication.

Your membership forms and dues will be submitted to ISA if you are not already an ISA member.

Thanks and Regards,



Murtaza I. Gandhi  
Scholarship Coordinator

PHONE (832) 491-6572  
EMAIL [murad@ibakerisa.com](mailto:murad@ibakerisa.com)  
www.isa.org/community/divap/PMCD

Ardis Bartle  
ISA Chair Geographic Assembly 2021-2022  
ISA Process Measurement and Control Division Director 2020-2022  
Gas Certification Institute, [www.gascertification.com](http://www.gascertification.com)  
Apex Measurement and Control, [www.apexmeasurement.com](http://www.apexmeasurement.com)

(713) 446-1902  
mailto: [ar@bartle@apexmeasurement.com](mailto:ar@bartle@apexmeasurement.com)

**Vishal Yadav**  
Semester: 7th IC Department  
Secretary, ISA Student Section LDCE  
Scholarship amount: 1400\$

Setting the Standard for Automation™




June 03, 2021

Dear Panchal Utsav Ketan (Gujrat Technological University, Enroll# 180280117034),

It is my pleasure to inform you that you have been selected to receive the prestigious ISA PMCD Scholarship Award for the year 2021-2022. You will receive \$750 towards your university tuition/fees.

On behalf of the board, I congratulate you on the achievement and wish you the best in your studies. We highly encourage the recipients to become active members of ISA PMCD and participate in Division activities with utmost dedication.

Your membership forms and dues will be submitted to ISA if you are not already an ISA member.

Thanks and Regards,



Murtaza I. Gandhi  
Scholarship Coordinator

PHONE (832) 491-6572  
EMAIL [murad@ibakerisa.com](mailto:murad@ibakerisa.com)  
www.isa.org/community/divap/PMCD

Ardis Bartle  
ISA Chair Geographic Assembly 2021-2022  
ISA Process Measurement and Control Division Director 2020-2022  
Gas Certification Institute, [www.gascertification.com](http://www.gascertification.com)  
Apex Measurement and Control, [www.apexmeasurement.com](http://www.apexmeasurement.com)

(713) 446-1902  
mailto: [ar@bartle@apexmeasurement.com](mailto:ar@bartle@apexmeasurement.com)

**Utsav Panchal**  
Semester: 7th IC Department  
Program Chair, ISA Student Section LDCE  
Scholarship amount: 750\$

## STUDENTS' ACHIEVEMENTS

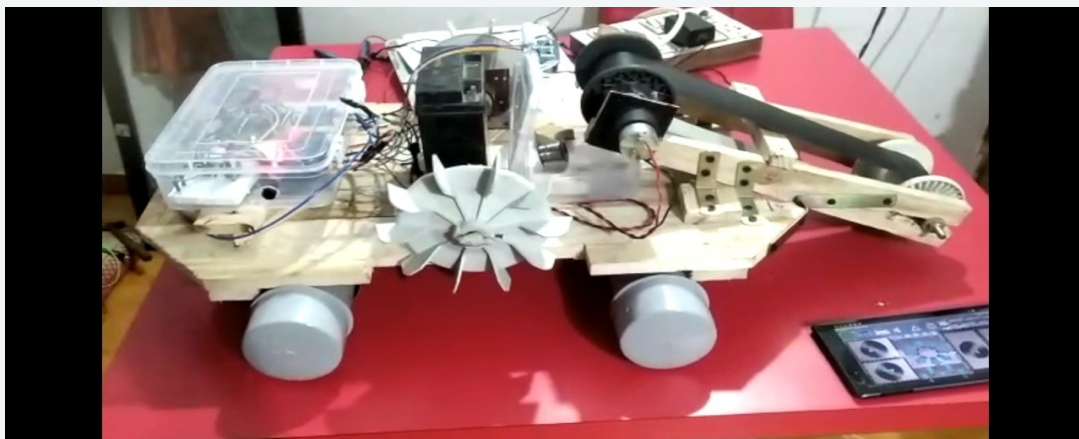
Aniket Prajapati a 4th year student of L.D. college of Engineering ( IC department) has done 1 month work from home volunteering Internship at Handout Foundation ( NGO).

Activities perform by him during internship:

- Promoting NGO on social Media platform.
- Spreading awareness related to health and lifestyle changes.
- Fundraising for NGO
- Content creating



Herak S Dharsandia, Gaurav Mishra and Kushdip Dadiyala students of 3rd year, participated in a hackathon named as "Clean-a-thon" organized by IIT Hyderabad. The hackathon was themed around creating solutions to problems concerning to natural resources like river cleaning, reducing air pollution, garbage management etc. The participants have to choose one of the domains for developing the solution. They have made a prototype robot for river cleaning and they were selected in the final round of the event.



"WE SHOULD NOT GIVE UP AND WE SHOULD NOT ALLOW THE PROBLEM TO DEFEAT US"

- DR APJ ABDUL KALAM

## STUDENT'S ACADEMIC EXCELLENCE AND INTERNSHIP OPPORTUNITY

## 7th SEMESTER

SR.NO	STUDENT NAME	CPI
1.	TEJWANI ROHAN	9.34
2.	DEY SARKAR ANINDA	9.03
3.	PATEL MAYANK	8.83

## 5th SEMESTER

SR.NO	STUDENT NAME	CPI
1.	YADAV VISHAL	9.01
2.	JOSHI AMIDHARA	8.49
3.	DOSHI UTSAV	8.44

## 3rd SEMESTER

SR.NO	STUDENT NAME	CPI
1.	MEVADA SMIT	9.15
2.	PATNAIK DEEPANKAR	9.06
3.	VORA JAINIL	9.02

## 1st SEMESTER

SR.NO	STUDENT NAME	CPI
1.	KHILVA BHATT	9.11
2.	MISHRA VAIBHAV	9.00
3.	ASHIRVAD DWIVEDI	8.95

## MIND-BLOWING INVENTION THAT COULD SAVE THE PLANET

Plastic-Made Roads That Last 10x as Long as Asphalt

Why send more plastic to the landfills when you can pave new roads with it instead? That's exactly what UK-based company MacRebur is doing. Their renewable asphalt—a mix of industrial and consumer plastic waste—replaces the oil-based sealing material that holds asphalt together in roads. The result? A newly improved asphalt that's 60% stronger, more durable, and—most importantly—eco-friendly.

## STUDENT'S ACADEMIC EXCELLENCE AND INTERNSHIP OPPORTUNITY

INTERNSHIP DETAILS		
SR.NO	STUDENT NAME	DETAILS/COMPANY NAME
1.	RONVELIA BHAVIK	IMAGE PROCESSING(MATHWORK) AND IMAGE PROCESSING RELATED PROJECT
2.	TEJ PATEL	GINNI FILAMENT PVT. LTD.
3.	RUTVIJ THAKKER	C.P TRIVEDI AND SONS (AUTOMATION IN TEMPLE ARCHITURE)
4.	UTSAV DOSHI	MAC POWER CNC MACHINES LIMITED
5.	MISTRY MIRAL	ZYDUS CADILA, ANKLESHWAR
6.	UTSAV PANCHAL	DATASCIENCE BOOTCAMP WITH MEGA PROJECT
7.	CONTRACTOR VISHAL	GAIN CONTROL (PLC BASED CONTROL PANEL MANUFACTURING)

**BOOK CHAPTER**

Vandana Patel, Ankit K. Shah,

Chapter 3 - Machine learning for biomedical signal processing,

Editor(s): Krishna Kant Singh, Mohamed Elhoseny, Akansha Singh, Ahmed A. Elngar,  
Machine Learning and the Internet of Medical Things in Healthcare,

Academic Press,2021,Pages 47-66,ISBN 9780128212295,



## PAPER PUBLICATION

The professors of the department along with excelling in their teaching in pandemic have additionally contributed a lot of the field of automation via publishing research papers with high impact factors. The papers were published in the research journals of national and international repute. Some noteworthy mentions are given below

Sr.no	Paper Title	Author Name	Publication	Published Date
1.	A review on Facial Emotion Recognition that uses Machine learning Algorithms.	1) Prof. Manisha Patel 2) Maulin Patel	International Journal of Engineering Applied Science and Technology	March– April 2021
2.	Design bounded robust controller using HJB solution for the Nonlinear Hybrid Dynamical Systems .	1) Dr. Ankit K. Shah 2) Dipak M. Adhyaru	European Journal of Control, Elsevier	May-2021
3 .	Motion Blurred Image restoration for Text Image	1) Dr. T.V.Shah 2) Shersiya Trupti	International Journal & Research Paper Publisher	May 2021
4.	Design of A Hybrid PID Plus Fuzzy Controller for Inner Loop and Outer Loop Speed Control of D.C. Motor	1) Dr. T.V.Shah 2) Mr. Himanshu B. Parmar	Journal of Experimental and Clinical Anatomy	May 2021
5 .	Application Development of Auto-Tuner for PID Controller tuning with Machine Learning and Optimizing Technique on remote server using Cloud Computing	1) Prof.V.P.Patel 2) Maharsh Thaker	International Journal of Engineering Applied Sciences and Technology	February 2021

## M.E. DISSERTATION - 2021

The students of our Masters in Engineering department have shown great resilience in the tough times of pandemic. These students have been actively progressing towards their academic work along with working on their research thesis. Some of the noteworthy mentions are as given below

Sr. no	Enrollment Number	Name of Student	Thesis Title
1.	190280703018	Sherasiya Trupti Mansukhbhai	Performance evaluation of Motion Blurred Image Restoration and Algorithm on Embedded Platform .
2.	190280703010	Maulin Patel	Identification of Human Emotions By Facial Expression using Artificial Intelligence Techniques.
3.	190280703022	Maharsh Thaker	Application Development of Auto Tunner For PID Controller Tuning With Machine Learning And Optimization Techniques On Remote Server Using Cloud Computing.
4.	190280703004	Devanshi Jani	.Automatic PCB Defect Detection using Image Processing On Embedded Platform.
5.	190280703016	Sana Vohra	Artificial Neural Network Based ECG Analysis For Arrhythmia Detection.

“THE GREATEST GLORY IN LIVING LIES NOT IN NEVER FALLING, BUT IN RISING EVERY TIME WE FALL. ”

– NELSON MANDELA

## CREATIVITY BY STUDENTS



**'Sketch of Forest'**  
By - Ronvelia Bhavik



**'Giraffee'**  
By - Sonara Ravikumar



**'Deer and Fawn'**  
By - Shaifali Singh



**'Scenery Paintings'**  
By - Shaifali Singh

"ART IS NOT WHAT YOU SEE, BUT WHAT YOU MAKE OTHER SEE."

- EDGAR DEGAS

## ALUMNI PROFILE



### NEHAL PIPALIYA - LDCE PAS-SOUT - IC ENGINEERING

Ms Nehal Pipaliya is an alumna of LDCE batch of 2014 with B.E. in Instrumentation and control engineering. Ms Neehal started her career as a trainee engineer with Prima automation further She acquired the training by Siemens and professionally qualified for simatics S7 1200/1500.

She is also having professional qualification for PROFICY HMI SCADA. Currently Ms Nehal has more than six years of experience in the automation and control domain. Recently Ms Nehal has been awarded with a Newcastle's Vice-Chancellor's International scholarship worth £4000 for pursuing her master programme.

### DEPARTMENTAL FACULTIES:

Dr. Manish Thakker, Professor and Head IC Dept.

Dr. T. V. Shah, Prof. V. P. Patel, Prof. D. H. Makwana

Prof. M. C. Patel, Prof. V. V. Patel, Dr. A. K. Shah, Prof. H. K. Shastri, Prof. L. S. Patel, Prof. D. V. Raninga, Prof. C. V. Shah, Prof. K. R. Joshi, Prof. U.G. Suhagia, Prof. N.A. Kanani, Prof. S. N. Shah, V. A. Patel, M. A. Prajapati

### EDITORIAL TEAM:

- Dr. Manish T. Thakker
- Prof. Manisha C. Patel
- Prof. Nidhi A. Kanani
- Mr. Tapan R. Chavda

### DESIGN TEAM:

- Mr. Tapan R. Chavda
- Mr. Vishal S. Yadav
- Mr. Gaurav A. Mishra
- Mr. Herak S. Dharsandia