

# GCET AICTE IDEA Lab

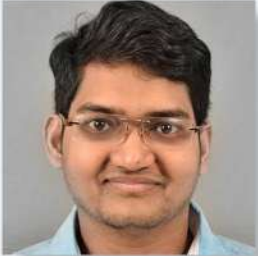
Let's nurture the product  
of your innovative idea.

**Activity Newsletter: 2022**  
**March-April**  
**Issue-02**

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## Message From Editors



“The capacity to learn is a gift; the ability to learn is a skill; the willingness to learn is a choice”

-Brian Herbert

As the editors of the IDEA Lab’s Activity Newsletter, it give us immense pleasure to broadcast the newsletter of IDEA Lab. As stated in the quote, IDEALab focuses on practical based learning for the Learners. IDEALab concentrates on fostering new ideas, creativity and innovation. Generally, it is observed that students excel in theorotical knowledge but are found stragglng in practical implementation of the same. Hence, this Idea lab will assist Learners to apply their cognition in a daily practice and fathom concepts by doing Hands-on. Repeatedly and intentionally, we have used the word ‘Learners’ here, as this Lab is not only restricted to learners, but its also open for the stakeholders of society. We all faculty members along with student co-ordinators plan frequent seminars, works hops and training sessions for Learners under this emerging lab. This bi-monthly newsletter will showcase the details of programs organized in the past and upcoming planned events. To make it more informative and interactive, we have also added a column for students; where they can publish their own fun-facts, blogs and many more. Best wishes to all the students and Happy Learning.

**Prof. Aakarsh S Jain & Prof. Endrick D Contractor**  
Editors,  
GCET AICTE IDEA Lab Activity Newsletter

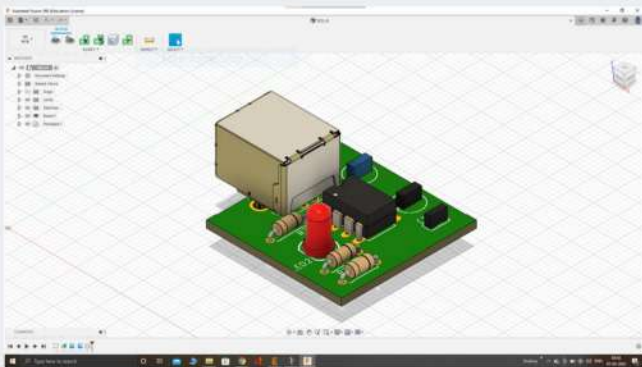


# PCB Design And Fabrication

The department of Electrical Engineering and Electronic and Communication Engineering along with the GCET AICTE IDEA Lab had organized a one day workshop on "PCB Design And Fabrication" on 7<sup>th</sup> March, 2022 at 9:30 AM. The workshop was conducted by the industrial expert Mr.Ninad Patel and Mr.Jil Gandhi.

The workshop was conducted in 2 sessions. In the session 1, participants were given a brief overview of Autodesk Eagle and the Fusion 360 Software. They were given the difference between the Autodesk Eagle and the Fusion 360 Software.

The participants were started with "Astable Multivibrator" using 555 timer IC. In this session participants learned about how to create new schemes and the new projects in the software and how to add the specific in schematic, adding values in the components.



## Workshop on MATLAB

The department of chemical engineering along with GCET AICTE IDEA LAB organized a one day workshop on “ Basics of matlab and simulink for chemical engineers” on 13th April 2022. The workshop was conducted in two sessions. The first session was conducted by Prof. Chintan Patel and Prof. Rajesh Sanghvi and the second was conducted by Dr Jalesh Purohit.

The main objective of this workshop was to give some basic knowledge of Matlab and SIMULINK and to give ideas of operation and design of chemical plants and methods that help improving production. In the first session the participants were taught the basics of matlab and basic functions of matlab. In the second session Dr Jalesh Purohit gave some ideas and were taught about the SIMULINK for chemical engineers by explaining the students its uses in the field of chemical engineering. The students had hands-on practice for the practical application of software.





## Workshop on MATLAB

A total of 37 students participated in the workshop which was organized on GCET campus. At the end there was a question-answer session in which Dr Jalesh Purohit actively responded to the questions of students.



## Report on Infotsav

The Information & Technology Department under the banner of GCET IDEA Lab organized “Infotsav’22”. The event was scheduled on 3<sup>rd</sup> and 4<sup>th</sup> March 2022. The chief guest for the event was Mrs. Vaishali Joshi, an alumna of GCET. She is currently working as a specialist programmer in Infosys, Pune. This 2 day event, divided in the 4 phases, was attended by more than 400 students from various engineering colleges of Gujarat.



The prime motive behind organizing the event was to make students aware of the Graph Database and Neo4j. Graph database a specialized, single-purpose platform for creating and manipulating graphs. Neo4j is a type of database management system which is used for the same.





## Report on Infotsav

The first phase was led by Mrs. Vaishali Joshi. She guided the students about the working of database management systems and how it can be used. The session ended with a question answer round where she answered the questions raised by the students.



On 5<sup>th</sup> March 2022, a closing ceremony was conducted. All the winners of QUIMIKONZ and TECHNOFRENZY were awarded with 1st position and 2nd position trophies. Along with the faculty coordinators, Smit Makhecha and Krishnan Navadia, the student coordinators from the IT department played an important role in making this event a huge success.





## DIY – Do It Yourself

**“All theory and no practical can make you feel it’s all hypothetical!”**

Keeping up the tradition, iMAZE'22 hosted its very own hands-on skill based event- DIY, where school kids visit the campus of GCET and are shown some interesting yet understandable projects. These small DIY projects help them understand the practical application of what they learn at school and in books. This year alongside the projects they were also shown the newly established AICTE IDEALab and its machineries like 3-D Printer, laser cutter, etc. and were given a memento made using the same.





## IMAZE-22'

The annual Tech Fest of G H Patel College of Engineering and Technology had a successful edition which was organized from 14<sup>th</sup> to 16<sup>th</sup> April 2022. It was the first mega-fest organized after 2 long years. IMAZE'22 was the most august and glorious fest, guiding a beautiful path towards the technical world. The 2 days of the extravaganza witnessed an overwhelming participation of students in the fest.



At IMAZE'22, students showed tremendous passion and determination to make the festival a success. During this fest, there were more than 45 student coordinators, 50 faculty coordinators, and 150 student volunteers who worked together to make the vision of IMAZE'22 a reality. There were various events which included 31 technical events, 8 non-technical events, and 5 pre-imaze workshops, from building walls to designing robots, from the colorful splendor of chemicals to the world of circuits and sensors.



## IMAZE-22'

There were more than 3000+ registrations in IMAZE'22. In which 1558 registrations were in technical events, 1161 registrations in non-technical events, and 337 registrations in pre-imaze workshops.



The workshop of IMAZE'22 included “Tech Eureka”, which was a state-level event for pre-final and final year students to present their projects. There was also a ‘Half-day hackathon’ where students were given an opportunity to showcase their technical expertise.

The tech-fest was successfully conducted ending with the cultural event (Rangmanch) and DJ night (Tarang).



## Report on Kaushalyam-1

Mechanical department under the banner of GCET AICTE Idea Lab organized a two day workshop named “KAUSHALYAM-1”. The workshop was scheduled on 4<sup>th</sup> and 5<sup>th</sup> March 2022 at 10:30 AM. The workshop was carried and conducted by Prof. Purnank Bhatt, Prof. Akarsh Jain, Prof. Mihir Solanki and Prof Jvalant Trivedi, who are currently Assistant Professor at our G H Patel College of Engineering & Technology, Vallabh Vidyanagar.



The primary objective behind organizing this workshop was to make students aware and familiar with the AutoCAD software and give them hands-on experience of the learning. AutoCAD is a commercial computer-aided design and drafting software application. It is used to create precise 2-D and 3-D drawings and models. It is also used in electrical and construction diagrams.



## Report on Kaushalyam-1

On the second day, Prof. Jvalant Trivedi gave a lecture on Additive Manufacturing by making them understand the basics of Additive Manufacturing and its application. The final session was given by Prof. Mihir Solanki, who gave a lecture on AutoCAD Advanced command demonstration where he introduced the students to some more advanced commands of the AutoCAD software and their uses which can make the work faster on the software. Later on the students were given hands-on exercise on Advance commands of AutoCAD.



The event concluded with a photo ceremony of the students with the faculties and the volunteers. Also a google form was shared to the students for the feedback of the event.

## Engineering Trivia

1. The first computer program was predicted by Ada Lovelace in a paper she published in 1843. Ada suggested that plan for calculating Bernoulli numbers with a new calculating engine called the “Analytical Engine”.
2. Big Brutus is the second largest electric shovel in the world. The electric shovel constructed in 1963 took more than 150 railroad cars and over a year to build. It is 160 feet tall and operates at 15,000 horsepower. The shovel had to be shut down in 1974 because the cost of operation was twice that of the value of coal it recovered.
3. Baspa-II and Chamera-II projects involved continuous concrete shuttering for tunnel lining which is used for the first time in the country.
4. The ancient Egyptians were some of the first civil engineers, constructing pyramids and other monumental structures.
5. Some chemical engineering wizards at the University of California Irvine, have developed squid-inspired invisibility stickers that can help soldiers escape detection in the dark, making them appear ‘invisible’.



## Upcoming Events

**Event Name :- Expert Talk on Blockchain Technology**

**Date :- 5<sup>th</sup> July, 2022.**

**Time :- 10: 00 AM**

**Department Name :- Computer Engineering**

**Place :- Seminar Hall**

**GCET AICTE IDEA Lab  
Departmental Students' Team**

**ME  
Department**

**Chinmay Rudragoudar**

**Deep Pathak**

**Jay Shah**

**Kunal Rana**

**Mitesh Maru**

**Sarang Pandya**

**Tirth Joshi**

**Yash Ranpariya**

**EC  
Department**

**Anubhav Shriwastava**

**Himanshu Patil**

**Mohsin Ali**

**Richa Mishra**

**Rishi Sha**

**Shrushti Parikh**

**Vidisha Sidha**

**Vraj Patel**

**MC  
Department**

**Abhishek Borad**

**Achyut Sapariya**

**Anil Maity**

**Ishan Shah**

**Mit Patel**

**Mehul Kamani**

**Rohan Umrliya**

**Shivam Rana**

**Shubham Sharma**

**Smeet Shah**

**Vinit Trivedi**

**Lovish Ojha**



## **CP Department**

**Abhishek Pandey**  
**Alay Parikh**  
**Bhumika Ailawadi**  
**Darshan Modi**  
**Dhruvi Vadariya**  
**Dhyey Dodiya**  
**Disha Patel**  
**Ishan Bhatt**  
**Jhanvi Shukla**  
**Kinal Patel**

**Moinuddin Mulla**  
**Nishi Patel**  
**Nishith Soni**  
**Prashant Solanki**  
**Riya Patel**  
**Sitanshu Goradia**  
**Smit Choksi**  
**Sneh Vachhani**  
**Vraj Mistry**  
**Yash Kotadia**

## **IT Department**

**Aayushee Gurjar**  
**Adnan Lokhandwala**  
**Henali Shah**  
**Henil Patel**  
**Jinay Shah**  
**Jyot Prajapati**  
**Krish bhadvaniya**  
**Krishshan Navadia**  
**Nainil Oza**

**Priyan Nakrani**  
**Rahi Patel**  
**Raj Ami**  
**Siddharth Chudasma**  
**Smit Makhecha**  
**Sujal Lakhani**  
**Yash Patel**  
**Yatri Shah**

## **CH Department**

**Aaditya Rai**  
**Aditi Thattil**  
**Dipti Rathod**  
**Jay Chauhan**  
**Kanaiya Patil**  
**Kushal Mehta**  
**Mahir Mansuri**

**Neer Patel**  
**Nil Zalavadiya**  
**Sagar Gohil**  
**Sania Pillai**  
**Harshil Barbhaya**  
**Hemal Dhankecha**

## **CL Department**

**Aditya Lodhari**  
**Kishan Kacha**  
**Nisarg Patel**  
**Pankaj Solanki**  
**Ravirajsinh Vaghela**  
**Yash Shaparia**

## **EE Department**

**Dhaval Kalathiya**  
**Dhruv Bhargav**  
**Dhyey Vithalani**  
**Emmanuel Kamugisha**  
**Gautam Prajapati**  
**Harshil Sathwara**

**Helly Parikh**  
**Hetvi Shah**  
**Mukul Goray**  
**Nand Patel**  
**Parth Vaghela**  
**Shivam Patel**



# Links For Registration

<b>Utilization by students of Host Institute</b>	<a href="https://bit.ly/3GZc4e8">https://bit.ly/3GZc4e8</a>
<b>Utilization by students of other Institute</b>	<a href="https://bit.ly/35c9ZgU">https://bit.ly/35c9ZgU</a>
<b>Utilization by faculty members of Host institute</b>	<a href="https://bit.ly/3G1mDfv">https://bit.ly/3G1mDfv</a>
<b>Utilization by faculty members of other institute</b>	<a href="https://bit.ly/3nYoewp">https://bit.ly/3nYoewp</a>
<b>Utilization by alumni of Host Institute</b>	<a href="https://bit.ly/3lrOTcS">https://bit.ly/3lrOTcS</a>
<b>Utilization by School Learners</b>	<a href="https://bit.ly/33PgGVY">https://bit.ly/33PgGVY</a>
<b>Utilization by School Teachers</b>	<a href="https://bit.ly/3H2zS0H">https://bit.ly/3H2zS0H</a>
<b>Utilization by Entrepreneur/ start-up</b>	<a href="https://bit.ly/3rLkoYx">https://bit.ly/3rLkoYx</a>
<b>Utilization by Industry</b>	<a href="https://bit.ly/3H36reZ">https://bit.ly/3H36reZ</a>
<b>Event conducted by AICTE-IDEA Lab</b>	<a href="https://bit.ly/3r0lsaY">https://bit.ly/3r0lsaY</a>
<b>Patent registered or granted by Utilization of AICTE-IDEA Lab</b>	<a href="https://bit.ly/35r91hb">https://bit.ly/35r91hb</a>
<b>Award received by Utilization of AICTE-IDEA Lab,</b>	<a href="https://bit.ly/35r91hb">https://bit.ly/35r91hb</a>
<b>Projects completed by using AICTE-IDEA Lab</b>	<a href="https://bit.ly/3rME7XS">https://bit.ly/3rME7XS</a>
<b>Operational Hours of the AICTE-IDEA Lab (Every Day)</b>	<a href="https://bit.ly/3AwJ0s1">https://bit.ly/3AwJ0s1</a>
<b>Investment in AICTE-IDEA Lab</b>	<a href="https://bit.ly/32vMX3N">https://bit.ly/32vMX3N</a>

**“ THE MAN WHO DOES NOT  
READ BOOKS HAS NO  
ADVANTAGE OVER THE ONE  
WHO CANNOT READ THEM.”**

- MARK TWAIN



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