

# G H PATEL COLLEGE OF ENGINEERING & TECHNOLOGY

(A Constituent College of CVM University)

## Mechanical Engineering Department

NEWSLETTER: 2021-22, ISSUE 01

### MECHANICAL ENGINEERING DEPARTMENT

**Mechanical Engineering is often referred to as the basic engineering discipline because whatever field of engineering one wishes to major in, the basics of Mechanical Engineering come in handy in the effective design, development, and optimization of equipment and devices used in any industrial activity.**

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### From Department Head

With great pleasure we are releasing this issue 01 of the department newsletter of academic year 2021-22. From this issue onwards enthusiastic students team have been inducted to exercise their creativity and innovation to contribute in making the department news letter more effective. Blogs from faculty members and students are also added features in this issue. Vipul Patel (Batch 2016-2020) jotted down his memories at GCET in this issue. We are eager to have memory sketches from our alumnae in the forthcoming newsletters.



**Dr. Darshak Desai**

### Editor's Note

'If you delegate authorities you create leaders'- Craig Groeschel. It is a great happiness to present this new look of newsletter, designed by our future leaders. In this semester, it's a matter of pride that department has undergone MOUs with three industries. We congratulate Mitesh for filing a patent. Institute has received a grant from AICTE to establish IDEALab.



**Prof. Aakarsh Jain**

### Student Editorial Team



**Kishan Patel**  
(Final year ME)



**Deep Shah**  
(Final year ME)



**Yash Patel**  
(Final year ME)



**Vandan Joshi**  
(Third year ME)

# Institute Update

## AICTE IDEA Lab Grant of Rs. 1.10 Crore

**GCET** is one of the two institutes of Gujarat to receive grant of **about ₹ 1.10 crore** for AICTE IDEA Lab.

**AICTE IDEA Lab** aims to build a **robust eco-system** for nurturing innovation and start-ups for sustainable technical and economic growth throughout the nation.

**Among all the institutes, only 2 got selected from Gujarat.**

**IDEA Lab Proposals**  
 Received: More than 200  
 Screened: 190  
 Shortlisted: 152  
 Selected: 49

AICTE (All India Council for Technical Education) IDEA Lab aims to build robust eco-system for nurturing innovation and start-ups for sustainable technical and economic growth throughout the nation. GCET is one of the two institutes of Gujarat to receive grant of about RS. 1.10 Crore for AICTE IDEA Lab on 2nd July 2021.

## GCET Ranking (2020-21)

**DATA QUEST**  
 (CYBER MEDIA MAGAZINE - DECEMBER 2020)  
**INDIA'S BEST 100<sup>th</sup> TECH-ENABLED ENGINEERING COLLEGES**  
 GCET HAS SECURED **9<sup>th</sup> RANK** IN WEST ZONE INSTITUTE & **58<sup>th</sup> RANK** ACROSS INDIA

NAME OF INSTITUTE	CITY	RANK
College of Engineering, Pune	Pune	1
J. J. Somaiya Institute of Technical Education & Research, Mumbai	Mumbai	2
SVKM's Institute of Information Technology, Solapur	Solapur	3
Government College of Engineering, Amravati	Amravati	4
Government College of Engineering, Nagpur	Nagpur	5
J. K. Somaiya Institute of Engineering & Technology, Solapur	Solapur	6
SVKM's Institute of Information Technology, Solapur	Solapur	7
Government College of Engineering, Karad	Karad	8
<b>G H Patel College of Engineering &amp; Technology</b>	<b>Valabh Vidyanagar</b>	<b>9</b>
SVKM's Institute of Information Technology, Solapur	Solapur	10

INSTITUTE NAME	CITY	RANK
Indian Academy of Technology	Bhubaneswar	01
Laxmi Institute of Engineering & Technology	Vijayanagara	02
SJ BGS Polytechnic	Mumbai	04
Government College of Engineering Karad	Karad Maharashtra	05
Chemical School of Engineering & Technology	Bangalore	06
Institute of Aeronautical Engineering	Hyderabad	07
<b>G H Patel College of Engineering &amp; Technology</b>	<b>Valabh Vidyanagar</b>	<b>08</b>

December, 2020 | 25 | www.dqindia.com | A CyberMedia Publication | DATAQUEST

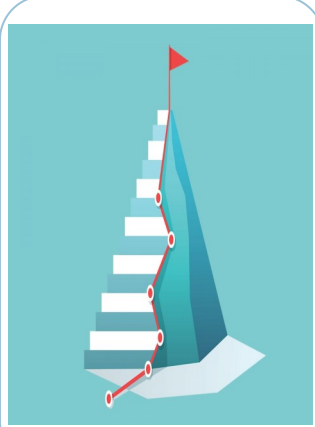
*ACHIEVEMENT IS LARGELY THE PRODUCT OF STEADILY RAISING THE LEVELS OF ASPIRATIONS AND HARDWORKS.*



**-9TH RANK IN WEST ZONE INSTITUTES**

**-58TH RANK ACROSS INDIA**

It is a matter of pride that as per a survey conducted by DATA QUEST (Cyber Media magazine – www.dqindia.com December-2020) for INDIA's Best 100 Tech-Enabled Engineering Colleges, GCET has secured 9th rank in the West Zone Institutes & 58th rank across India on 30th January 2021.



## Students achievements



*OPPORTUNITY DON'T  
HAPPEN YOU CREATE THEM.*

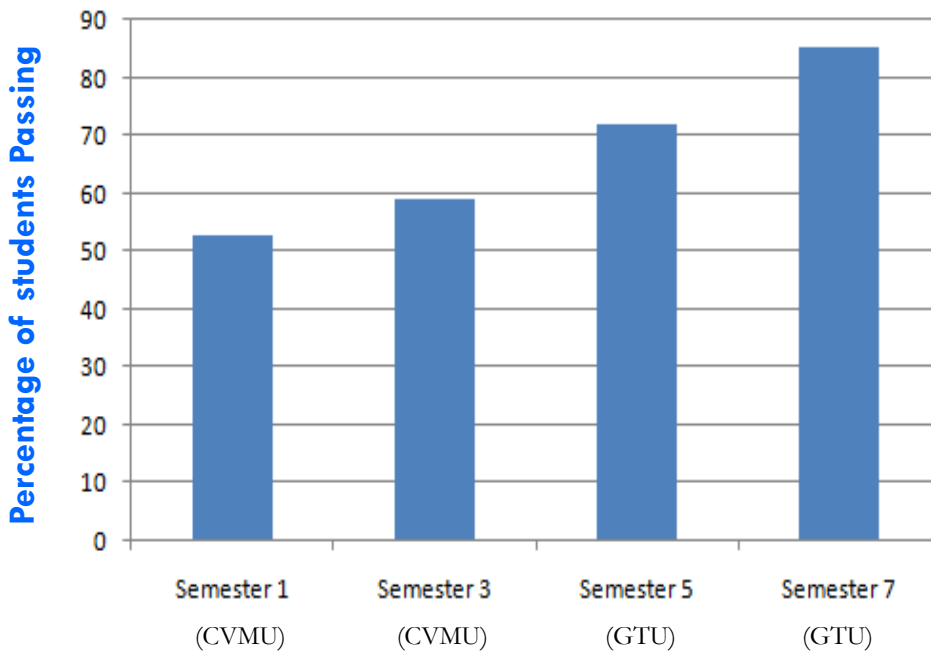
Mr. Mitesh Jayeshbhai Maru (190110119036), student of the third year, Mechanical Engineering Department has successfully filed a Design Patent (Industrial Design) on "M-SERIES Radiation Technology Based Automatic Faucet" under the mentorship of Prof. Jvalant Trivedi on 17th January 2022. Under student startup and innovation policy of Gujarat Government, Mr. Mitesh Maru has received full financial support for "Intellectual Property Rights" filing and prosecution from innovation Hub (i-Hub). His design patent application on automatic faucet has been approved by the panel of experts at i-Hub (Gujarat Government Enterprise). He has already filed an Indian patent for this concept. He has also received financial assistance of ₹ 20,000 for product development from GTU innovation council under scheme of SSIP. We appreciate him for this innovative work and wish him all the luck for success.

**i-Hub**  
(A Gujarat Government Enterprise)

**-MR. MITESH MARU  
STUDENT OF ME-  
CHANICAL ENGI-  
NEERING DEPART-  
MENT OF GCET HAS  
SUCCESSFULLY  
FILED A DESIGN  
PATENT.**

# Result analysis

(Winter-2021)



## Department's top Performers



Chirag Shing  
9.21 SGPA  
(Semester 1)



Jemish Jetani  
8.09 SPI  
(Semester 3)



Shubhankar Jadhav  
8.09 SPI  
(Semester 3)



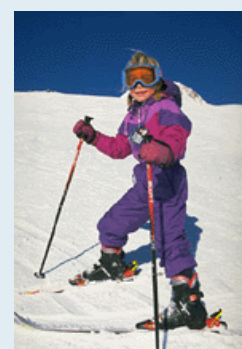
Kachwala Mustufa  
8.96 SPI  
(Semester 5)



Bhakar Daksh  
8.96 SPI  
(Semester 7)



*EDUCATION IS OUR PASSPORT TO THE FUTURE, FOR TOMORROW BELONGS TO THE PEOPLE WHO PREPARE FOR IT TODAY.*





## Industrial visits

### Industrial Visit to "Flotech Engineering Pvt Ltd, Rajkot"



*SCIENCE CAN AMUSE AND FASCINATE US ALL, BUT IT IS ENGINEERING THAT CHANGES THE WORLD.*

*- ISAAC ASIMOV*

An Industrial Visit to "Flotech Engineering Pvt Ltd, Rajkot" was arranged for fourth year students on 9th October 2021, Total 49 students participated in the visit. FLOTECH Engineering Pvt. Ltd. Is a leading manufacturer company in the pump industry. They provide world class pumping solution which is technically most advanced, Excellent energy efficient and enduring durable.

### Industrial Visit to "Jyoti CNC Automation Ltd, Rajkot"



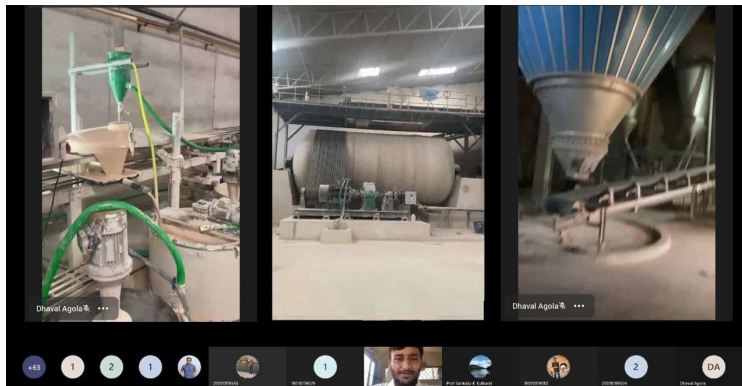
An Industrial Visit to "Jyoti CNC Automation Ltd, Rajkot" was arranged for fourth year students on 9th October 2021, Total 49 students participated in the visit. Jyoti CNC Automation Ltd has a wide product basket consisting of series of CNC Turning Centers, CNC Turn Mill Centers, CNC Vertical Machining Centers, CNC Horizontal Machining Centers, CNC Vertical Line Machines and High-tech CNC 3 axis and 5 axis machining centers.



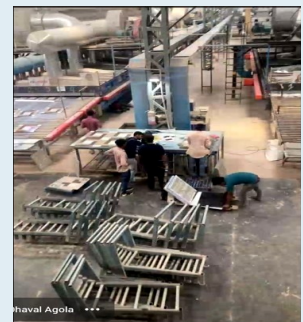
# Industrial visits



## Virtual Industrial Visit to "Greenstone Granito Pvt Ltd Morbi"



A virtual tour to Greenstone Granito Pvt Ltd Morbi was arranged on 13th August 2021, for third year Mechanical engineering students. The tour was guided by managing partner of company Mr. Uttam Trasadiya. He told about company profile, Products information and manufacturing process details. All manufacturing and testing facilities were shown. In the end there was question answer session in which many queries of students related manufacturing, quality control, finance, inspection and testing were answered.



**-GREENSTONE GRANITO PVT LTD**

## Virtual Industrial Visit to "Inducto Cast , VV Nagar, Anand"



A virtual tour to "Inducto Cast" was arranged for third year students on 14th August 2021, Total 39 students participated in visit. Inducto Cast is Manufacturer of CI Casting, Cast Iron Castings, SG Casting and SG Iron located in Vithal Udyog Nagar Anand.



**-INDUCTO CAST**



# Placement Details


Total no. of company visited	Total no. of students placed
16	58

*HAVING A GREAT IDEA FOR A PRODUCT IS IMPORTANT, BUT HAVING A GREAT IDEA FOR PRODUCT DISTRIBUTION IS EVEN MORE IMPORTANT.*


FROM CAMPUS TO CORPORATE



# MOU




**G H Patel College of Engineering & Technology**  
(A Constituent College of CVM University)




## MOU signed between...

**Mechanical Engineering Department**  
GCET, V V Nagar



**ATKOTIYA ENGINEERING WORKS**  
Mfg & Exporter of Precision Components

EXPERIENCE THE EXCELLENCE



Mr. Ajay Atkotiya (Manager)  
GCET Mechanical Alumni  
2002 Batch


**MOU highlights...**

- Outcome based Trainings
- Internships
- Industrial Visits
- Skill development
- R & D Services and many more




The mechanical engineering department of GCET has signed an MOU (Memorandum of Understanding) with Atkotiya Engineering Works Pvt. Ltd. on 27th December 2021. Atkotiya Engineering Works are one of the profound names engaged in manufacturing, supplying and exporting a commendable assortment of cylinder liners, centrifugally cast and piston for marine auxiliary Marine Engines. As a part of this MOU, students of GCET will get the direct benefits of industrial visits, internships, outcome-based training, skill development, R&D services and many more from the industry.

***“THE GREAT AIM OF EDUCATION IS NOT ONLY KNOWLEDGE BUR ALSO ACTION AND PRACTICAL EXPERIENCES”***




**G H Patel College of Engineering & Technology**  
(A Constituent College of CVM University)




## MOU signed between...

**Mechanical Engineering Department**  
GCET, V V Nagar



**FLOTECH PUMPS**  
Innovation & Excellence



Mr. Kashyap Suvagiya (Director)  
GCET Mechanical Alumni  
2010 Batch

**MOU highlights...**

- Outcome based Trainings
- Internships
- Industrial Visits
- Skill development
- R & D Services and many more

The department of Mechanical engineering has signed an MOU with Flotech Engineering Pvt. Ltd. on 5th January 2022. It Is a leading manufacturer company in the pump industry and also known for their world class pumping solutions, having presence across Asia and Europe.

Students will get the direct benefit of outcome-based training, internships, industrial visits, skill development, R & D services for final year projects and many more as part of this MOU.



**-FLOTECH ENGINEERING**



# MOU



G H Patel College of Engineering & Technology  
(A Constituent College of CVM University)



## MOU signed between...

Mechanical Engineering Department  
GCET, V V Nagar



### MOU highlights...

- Outcome based Trainings
- Internships
- Industrial Visits
- Skill development
- R & D Services and many more



Mr. Uttam Trasadiya  
(General Administrator)  
GCET Mechanical Alumni  
2014 Batch



The department of Mechanical engineering has signed an MOU with Greenstone Granito Pvt. Ltd. on 25th January 2022. It is a leading manufacturer company in the domain of vitrified tiles, ceramic tiles, porcelain tiles, granite tiles, stone flooring tiles etc, located at Morbi, the ceramic hub of India. As a part of this MOU, students will get the direct benefits of outcome-based training, internships, industrial visits, skill development, R & D services for final year projects and many more.



# From Student

## [Blog on Startup by “Vandan Joshi”](#)



**Vandan Joshi**

(Third year ME)

### WHAT IS LEAN STARTUP?

In simple way we say that do mistake and solve mistake. Don't startup to become a rich, do startup to learn. If you want to do startup don't make an advanced product. Make basic structure of product. This is best thing you have to implement in your startup. I give you one example that you are build an app and that app is perfect without any problem. For making an perfect app you should have a fund, company, good team and a marketing team. After you launched that app in market. It is hard to survive in market for that app because you wasn't taken survey of a people, this app is built by number of people and you lost you most fund for built that app. In second situation you don't have any team, fund or a company. You are build a basic structure of app. There will be many errors in that app. You have to do work in one subject. You have reason that why you are build that app and after launch that app. After launching take review for people and modify that app. This is lean startup strategy. In this second situation, customer think that you are solving their problem and then they become your loyal customer. This is best way to become billionaire. Our startup is depend on customer wish. If we are persent our wish, then customer neglect our product.

### **What is MVP?( MINIMUM VIABLE PRODUCT)**

Develop technique in which you have to introduce new product in market with basic features, but enough to get customer attention. After getting sufficient feedback from user the only release final product.





**Prof. Mihir  
Solanki**  
(Assistant Pro-  
fessor)

## From Faculty

### [Blog on ISO by "Prof. Mihir Solanki"](#)

#### **International Organization for Standardisation (ISO)**

We have heard this word many a times that the firm, product or service is ISO certified, but do we know the meaning of this?

The answer is may be yes or no.

ISO stands for INTERNATIONAL ORGANIZATION FOR STANDARDISATION. It evolved from Greek word isos, which stands for equality. It indicate that any firm which is ISO certified follows the standard procedure to manufacture the item or to deliver the service.it ensures that the facility has inbuilt quality standards and it has integrated quality assurance, which further indicates every time product delivers is of same quality due to same sequence to manufacture and inspect the process.

The current version of ISO is of year 2015, previous revision was made in 2008. With change in modern technology and advancement certain features are added with every new revision. Even in ISO, depending upon the class of industry, it require to apply in respective domain. The domains specific are as follow.

ISO 22000 – Food safety

ISO1400- Chemical Industry

QS 9000- Automobile industry

ISO 13485 –Medical services

TL9000- Telecommunication industry

## From Faculty

The global acceptance of ISO for quality improvement is as follow based on ISO census of 2014.

Rank	Country	No. of certificates
1	China	342,800
2	Italy	168,960
3	Germany	55,363
4	Japan	45,785
5	India	41,016
6	United Kingdom	40,200
7	Spain	36,005
8	United States	33,008
9	France	29,122
10	Australia	19,731

## From Alumnas

Mechanical department, my department , it has immensely potent faculties who from their experience have helped me grow into a professional Engineer from a layman , who have taught me to think like an engineer. Professor Aakarsh Jain and Dr. Mukesh Bulsara have been a great help in shaping me in my final years. I think the most significant asset our college has are the department faculties who are always eager to satisfy our enthusiasm , followed by the facilities which the department workshop has to offer in terms of practical experiences. I have been a totally different men from the boy who took admission in GCET in 2016. It has been 2 years since I graduated from the college, I am starting my next chapter at University of Guelph, Canada. The knowledge that I gained from my college days and work experience which I gained from 1 year of work experience will surely help me bloom there and grow infinitely throughout my life. I would like to thank my parents and all of my Gurus at GCET for this experience of life time.



**Vipul P. Patel**

**BE(Mechanical)**

**Batch : 2016-2020**