Insight is the quarterly newsletter of Government Engineering Collage, Valsad

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#### Principal's message

- Dr. V. S. Purani



# **Virtual Lab Activity of GEC**, Valsad

To provide remote access to Labs in various disciplines of Science and Engineering, the Ministry of Human Resources Department has started Virtual Lab projects under National Mission on Education through ICT. Since 2018, GEC Valsad has taken up this opportunity as the Nodal Centre under IIT Bombay and made this facility available to the students.

BRANCH	No. of Users	No. of Usage	Available Practical
Chemical	506	557	14
Electrical	747	1170	19
Environment	80	111	08



#### Rashtriya Uchchatam Shiksha Abhiyan

A workshop on "Fundamental of PLC Programming" was planned on 13/10/2021 & 14/10/2021 under Rashtriya Uchchatam Shiksha Abhiyan (RUSA) banner component 9 by the Electrical department coordinator Prof. J. D. Patel and Institute coordinator Prof. D. N. Patel. It was carried out by Electrical Engineering Department. Mr. Hitesh Bhingradiya conducted the workshop to make the aspiring engineers acquainted with the conceptual as well as practical knowledge of Industrial Automation & the latest technologies being used to achieve industrial automation. This workshop provided adequate hands-on experience to supplement the knowledge disseminated during the lecture sessions. Total 20 students and two faculty members benefitted from the workshop.



Glimpse of a workshop on "Fundamental of PLC Programming"

#### **Finishing School**

Finishing school training program is an excellent initiative taken by Education Department, Government of Gujarat in order to impart strategic training and development on student's skill of Higher and Technical Education to make them Industry-ready. It is an excellent move to enhance the employability of students within nation as well as in the global industries. In this context, since the academic year 2016-17, almost 13 batches (532 students) have been trained till date by this training program at Government Engineering College, Valsad.

In continuation, as of now in the current academic year (2021-22), Batch-2 had registered and completed its life skill and employability skill training [SET-A & SET-C] through offline finishing school training program during 30/09/2021 to 09/10/2021 (total hrs - 40). Ms. Meghna Soni & Mr. Arup Sinha (Empanelled trainer, KCG Finishing School) were appointed to provide the said training.



Last day of FS training; Batch-2

#### **Unnat Bharat Abhiyan: (UBA)**

The tree plantation activity was carried out in Chichwada village under the guidance of UBA cell on 1/10/2021 by mechanical engineering students of GEC Valsad. The tree plantation was carried out on the border of a playground and pond. Around 18 different plants were planted by students. Also, the students spread awareness and motivated the villagers to maintain the harmony of the environment by planting more and more trees. Swachhta Abhiyan was also carried out on the same day in Chichwada village. Students collected the wastes and cleaned the playground, surroundings of the pond, road, etc. Figure 2 (a) and (b) show the tree plantation and Swachhta Abhiyan activity at Chichwada village.





Tree Plantation (top) and Swachhta Abhiyan (bottom) activity at Chichwada village under UBA

The collection of one-time used plastic was carried out in Chichwada village under the guidance of UBA cell on 1/10/2021 by mechanical and chemical engineering students of GEC Valsad. Students collected most of the one-time used plastic waste from the village and also from visiting door to door. The students spread awareness to the villagers about the harmful effects of plastic waste in the environment and tried to convince them to stop using plastic. The used ball pens were also collected by students.



Glimpse of the "collection of one-time used plastic Activity"



#### Student Start-up and Innovation (SSIP)



#### Institution's Innovation Council (IIC)

On December 2021 ARIIA (Atal Ranking of Institutions on Innovation Achievement) was declared. Atal Ranking of Institutions on Innovation Achievement is a program of the Department of Education (MoE), Government of India to systematically balance all tertiary institutions and universities in India with indicators related to "New Development and Entrepreneurship Development" among students and skills.

Important indicators to consider for ARIIA were Budget and Funding, Infrastructure and Resources, Awareness, Promotions and Idea Generation & Innovation support, Promotion and Support for Business Development, New Learning Methods and Lessons, Intellectual Property Generation, Technology Transfers and Trade, New Innovations in Institutional Management.

Our Institute participated in a category, Colleges/Institutes (Govt. & Govt. Aided) (Technical) at ARIIA for the year 2021. Here the ranks are given in sequence as ranked institute, Band Excellent, Band Performer, Band Promising, Band Beginner. In ranked institute, there were total five Institute nation-wide including L. D. College of Engineering Ahmedabad at 3rd rank. Then one institute was given band-excellent tag and then Government Engineering College, Valsad was there in a list of Band performer. Government Engineering College, Valsad was the only government college in the list of engineering domains of Gujarat State. In band promising, there were total 28 colleges from India and in band beginners, there was a total of 42 Institutions from India. Total 1438 institutes participated in the ARIIA ranking this year. This great achievement is just followed by the recent declaration of the Institute Innovation Council, annual performance rating in which our Institute got 3.5 out of 5 stars. In the year 2020 Institute received the Prashansha award as best performance (2<sup>nd</sup> rank) in Gujarat state.



A screenshot of the ARIIA Ranking 2021

Ministry of Ecucation Government of India		INSTITUTION'S INNOVATION COUNCIL (Ministry of Education Institute)		/ATION CELL		
Institutions' Innovation Council (2020-21) Annual Performance: College & Standalone Institutions Category						
IIC ID	AISHE CODE	Institute Name	State	Star Rating		
Central/CRO						
IC201810858	C-35967	Sagar Institute of Science Technology & Research	Madhya Pradesh	4		
IC201912949	C-52089	SRI AUROBINDO INSTITUTE OF PHARMACY	Madhya Pradesh	4		
IC202014267	C-16658	Bhilai Institute of Technology Durg	Chhattisgarh	3.5		
IC201811408	C-16641	Government Engineering College	Chhattisgarh	3.5		
IC201810140	S-88	ENTREPRENEURSHIP DEVELOPMENT INSTITUTE OF INDIA	Gujarat	3.5		
IC202014183	C-338	Gandhinagar Institute of Technology	Gujarat	3.5		
IC201912842	C-58235	Ganpat University Institute of Computer Technology	Gujarat	3.5		
IC202115689	C-135	GOVERNMENT ENGINEERING COLLEGE,	Gujarat	3.5		
IC201810301	C-439	Institute of Technology Nirma University	Gujarat	3.5		
IC201912914	C-212	L.D.COLLEGE OF ENGINEERING	Gujarat	3,5		
IC201810510	C-36305	Government Engineering College	Madhya Pradesh	3.5		
IC201811212	C-35964	IES College of Technology, Kalikheda	Madhya Pradesh	3.5		

A screenshot of the IIC Annual Performance 2021





#### **NSS and Azadi ka Amrut Mahotsav**

The National Service Scheme (NSS) is a Central Sector Scheme of the Government of India, Ministry of Youth Affairs & Sports. It provides the opportunity to the student youth of technical institution, Graduate & Postgraduate at colleges to take part in various government-led community service activities & programs.

The sole aim of the NSS is to provide hands-on experience to young students in delivering community service. Our NSS volunteers are taking part in various activities such as National integration camp, the celebration of Azadi ka Amrut Mahotsav, blood donation camps, tree plantation in adopted village, cleaning and beautification of village, service, covid-19 duties given by state governments, collection of the unused and left-out medicine for covid-19 patients, parades on Independence Day and Republic Day celebration at our college. In this NSS GECV team Prof. J. R. Joshi, Assistant Professor, Chemical Engineering Department is working as a coordinator.

To create awareness among the people regarding cleanliness and health, the N.S.S team of Government Engineering College, Valsad has organized a plogging run at Tithal Beach, Valsad on 05/10/2021. This drive was coordinated by Prof. J. R. Joshi, Chemical Department. In this drive total of 29 volunteers have participated. As per the five Prakalp suggested by Education Department, and DTE, the NSS team and UBA team of GEC Valsad has visited two villages Bhagod and Chinchwada of Valsad taluka, for making people aware of single-use plastic, beautification of the village and, storage and cleaning of water resources on 29/10/2021.

Sr No	The activity of the quarter	Date
1	Plogging run	05/10/2021
2	Village beautification	29/10/2021
3	Rashtriya Ekta Divas	30/10/2021
4	Legal Awareness Program	11/11/2021

This awareness drive has been coordinated by a speech from N.S.S. coordinator Prof. J. R. Joshi, Chemical Department, and UBA coordinator Dr. B. R. Sudani, Chemical Department. In this drive, faculty members such as Prof. Pratik Patel, Mechanical Department, and Prof. D.C. Parmar, Electrical Department with 13 students have also participated. They carried out cleanliness activity nearby the water sources. Both Anganwadi Bhagod and Navinagari were visited and explained to them about the livelihood program and discussed the need and possibilities for skill development among the villagers. We collected the single used plastic waste to inspire villagers about it and to motivate them. Teams also explained the harmfulness of such debris in the surrounding.



Group photo of NSS team at Tithal beach for Plogging Run



Group photo of NSS and UBA team for village beautification



Pledge taking ceremony at GEC Valsad on Rashtriya Ekta Divas

As per the direction given by the DTE, GEC Valsad has decided to celebrate "National Unity Day" on 30/10/2021 under the banner of Azadi ka Amrut Mahotsav. To celebrate this day, GEC Valsad has arranged a pledge-taking ceremony at G-102. The overall coordinator who was conducting the event was Prof. J. R. Joshi. The event was started with a speech given by Dr. N. M. Patel, Head of the Chemical Engineering Department. The energetic and valuable words by him inspired all and filled a great enthusiasm in all of the team members. There was a total of 72 faculty and staff members present during the pledge-taking ceremony.

The Government of India is celebrating the 75th year of Independence as "Azadi ka Amrut Mahotsav" across the country and as a part of this celebration, The National Legal Services Authority (NALSA), Supreme Court of India, New Delhi has launched a PAN India Awareness Campaign. As a part of this campaign, the Gujarat State Legal Services Authority is carrying out various awareness activities across the State of Gujarat as per the Action Plan of NALSA. Under this campaign, Government Engineering College, Valsad & Government Polytechnic, Valsad in collaboration with Valsad Legal Services Authority organized the "Legal Awareness Camp" on 11/11/2021 at GEC, Valsad. Expert lecture about legal laws and schemes of India was delivered by Mr. Hemantbhai Tandel and Advocate Amitkumar Gupta and made us aware of most of the rules and regulations of the Indian constitution. A total of 225 students participated in this drive.



Expert delivering lecture on Legal awareness program at GEC

On October 8, 2021 Government Engineering college, Valsad organised Garba to celebrate the same. It was unanimously decided to follow all the covid protocols and accordingly it was agreed upon to allow those students who have been vaccinated against Covid-19 and who produced parent's consent form for the same. On announcement, 125 students registered for the event. The event was coordinated by Prof.J.R.Joshi and Prof.P.B.Desai. Both the faculties motivated and prepared students in such way that it cultivated in students' leadership and team work. The event started at 3:00 PM with Aarti and Stuti of the goddess by the principal Dr.V.S.Purani. All the students and faculties participated in the event wearing traditional dress. It was a rejuvenating experience for all after the pandemic.



Glimpse of Navratri/Garba celebration under the aegis of Azadi ka Amrut Mahotsav

#### **Gujarat Technological University (GTU) Results**

The institute has achieved success ratio of 99.78% in B.E.  $8^{th}$  semester, Summer 2021 examination conducted by GTU and following students have secured the first rank in their respective branch by attaining 10 SPI.

Sr. No.	Branch	Enrollment No.	Name of Top Ranker
1	Chemical	170190105001	Ansari Ayazhussain Shaukathhussain
2	Civil	170190106020	Mali Nikhil Shailesh
3	Electrical	170190109017	Panchal Dhruvi Manishkumar
4	Environmental	170190113019	Pande Divya Prakashbhai
5	Mechanical	170190119006	Dave Meet Baldevkumar

# Internship of Final year students:

From academic year 2021-22, GTU made 12 weeks summer internship training mandatory by introducing it as a part of curriculum for all 8 semester students. All department made their efforts to avail best internship option available to our students in industry. The summary of  $8^{th}$  sem. student internship training is as below.

Branch	Total	No. of Students	No. of Students
	Students	opted for Internship	opted for Project
Mechanical	134	132	2
Chemical	124	124	0
Civil	69	69	0
Electrical	56	50	6
Environmental	44	44	0
Total	427	419	8

#### MoU (Memorandum of Understanding) signed:

The institute has signed 37 strategic and 8 Investment MoU in line with directive of Vibrant Gujarat- 2022. The collective effort made by all departments of GEC Valsad made this possible.

#### **Industrial Visit:**

Looking to the significance of field visits along with regular teaching-learning modules, visionary higher-ups of the Education department and Directorate of Technical Education of Gujarat state grabbed the opportunity to send their students to Asia's largest Geotechnical laboratory, at L & T Geo Structure Design at village Vankaneda. The education department issued a directive and schedule to all the technical institutes to arrange a visit of final and pre-final civil engineering students as per the order number U24/10204 /103/14 dated 14/09/2021. As per this order Dr. V. S. Purani, Principal of Government Engineering College, Valsad has been appointed as a South Zone Cocoordinator for good execution of technical visits of South zone colleges. As per the order,

1. 53 final year (7th sem) students of Civil engineering department have visited L&T Geo Structure Design at village Vankaneda (Asia's Largest Geotechnical Lab) on 23/10/2021 along with Faculty Prof. P. S. Patel & Prof. D. T. Barot.



2. 50 pre-final year (5<sup>th</sup> sem) students of Civil engineering department have visited L & T Geo Structure Design at village Vankaneda (*Asia's Largest Geotechnical Lab*) on 30/10/2021 along with Faculty Prof. V. D. Patel & Prof. N. M. Patel.



#### Webinar organized by the Department

An Online session was organized by the Electrical Engineering Department for the students of all branches on the topic of "My Story as an Entrepreneur". The talk was delivered by Mr. Bharat Parmar, Shyam Innovations on 31/12/2021. Around 100 Students have participated in this event. The event was organized by Head of the Department Dr. K. L. Mokariya and Department SSIP Coordinator Prof. N. I. Patel.

#### Webinar Expert Lecture/Talk delivered by Faculty Members

- ✓ A webinar was delivered by Dr. B. R. Sudani (Asst. Prof. Chemistry.) on "National Integration and the Youth of India" at Dr. S & S. S. Ghandhy Government Engineering College, Surat on 25/11/2021.
- ✓ A Webinar was delivered by Prof. H. M. Jariwala (Asst. Prof. Chemical Engg. Dept.) on "Importance of Mass Transfer Operations in Chemical Industry" at Chemical engineering department, Government polytechnic Bharuch on 24/09/2021.
- ✓ A Talk was presented by Dr. N. M. Patel (Professor, Chemical Engg. Dept.) on A multi-objective optmization: Chemical Engineering Applications at L. D. Engineering College on 21/12/2021.
- ✓ A seminar was presented by Dr. V. S. Purani (Principal, GEC Valsad) and Dr. N. M. Patel (Professor, Chemical Engg. Dept.) on Quality Education and Employability: NEP Perspective at GEC Valsad under Good Governance program on 25/12/2021.
- ✓ An Expert lecture was delivered by Prof. J. D. Patel, Electrical Engg. Dept. on "Thermal Power Station" in Electrical Engg. Department at Government Polytechnic, Valsad on 21/10/2021.



Dr. V. S. Purani (Principal, GEC Valsad) and Dr. N. M. Patel (Prof., Chemical Engg. Dept.) during seminar under Good Governance program on 25/12/2021

- ✓ An Invited Talk was delivered by Prof. H. S. Wani, Electrical Engg. Dept. on "Simulation Tools for Implementation of Power Electronics Systems" in AICTE (ATAL) Sponsored one-week FDP (online) on "Power Electronic Systems and its real-Time Control Implementation in DSP" at Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai on 11/11/2021.
- ✓ An Expert lecture was delivered by Dr. K. L. Mokariya, Electrical Engg. Dept. as a part of the SSIP sensitization program "Understanding and Building Skills for Creativity, Innovation and Start-ups" at ROFEL Shri G.M. Bilakhiya, College of Pharmacy on 26/10/2021.
- ✓ An Expert lecture was delivered by Dr. K. L. Mokariya, Electrical Engg. Dept. at GUJCOST sponsored two days National Conference on "Recent trends in research in Electrical Engineering" (RTREE 2K21). The session was delivered on "Be your own boss through start-ups and Innovations" at SSASIT Surat on 25/11/2021.

#### **Book Chapter/Paper Publication by Faculty Members**

- ✓ Dr. N. M. Patel (Professor, Chemical Engg. Dept.) as a co-author published a book chapter titled "SNOV-DNOV Mesh Sorting for Multi-objective Optimization" Mathematical Modelling, Computational Intelligence Techniques and Renewable Energy, 1405 (2021) 299-311.
- ✓ Prof. J. R. Joshi (Asst. Prof., Chemical Engg. Dept.) as a co-author presented a paper titled "Isolation and Purification of Stevioside from stevia leaves" in an International Conference of International Chemical Engineering Conference on 17/09/2021
- ✓ Prof. N. I. Patel, Electrical Engg. Dept. as a principal author published a paper titled "Review Article: Concepts of Electric Vehicles" in an International Journal of Innovative Research in Technology of ISSN No. 2349-6002.
- ✓ Dr. K. L. Mokariya, Mr. Ganesh R. Patil, Electrical Engg. Dept. student and Mr. Snehal S. Patel, Ex-Alumni student of Electrical Engg. Dept. presented paper titled "Plant Automation for Energy Efficient Operation and Emission Reduction", at two days National Conference on Recent trends in research in Electrical Engineering (RTREE 2K21) during 25/11/2021 & 26/11/2021.

#### Other achievements by Faculties

- ✓ Dr. K. L. Mokariya was appointed as a jury member for GUJCOST sponsored two days National Conference on "Recent trends in research in Electrical Engineering (RTREE 2K21) at SSASIT, Surat. The conference was organized on 25/11/2021 and 26/11/2021 and Dr. K. L. Mokariya evaluated papers while seeing delivered presentations of participants dated 25/11/2021.
- ✓ A research paper was reviewed by Prof. H. A. Vaidya in the "Solar Energy" journal published by Elsevier.

#### Training details of Faculty

Total 11 faculties of institute has successfully completed total 13 FDP trainings in offline/online mode. This includes 4 faculties from Chemical, 4 faculties from Electrical, 2 faculties from Environmental and 1 faculty from Mechanical.

#### Staff left service

Name of Faculty	Designation	Department	Date of service left
Mitul D. Prajapati	Instructor	Electrical Engg.	07/12/2021

# Sports



Glimpse of the gold medal-winning achievement in badminton

# Training and Placement cell of of the Coursera which were students and faculties in diffusion Utilising this opportunity, any enough to meet the global star works with various universities 4000 online courses from 150 gain new skills related to Dat Design and Computer science expired on 31st December 2021 platform and 113 learners had courses in their subject of. This

preferences at GEC Valsad

Training and Placement cell of GEC Valsad had acquired licenses of the Coursera which were used at free of cost by all the students and faculties in difficult time of global pandemic. Utilising this opportunity, any curious learner can be competent enough to meet the global standards and expectations. Coursera works with various universities and organizations to provide over 4000 online courses from 150 leading universities worldwide to gain new skills related to Data science, Business, Engineering, Design and Computer science. The license of Coursera was expired on 31st December 2021. Total 268 learners has joined the platform and 113 learners had successfully completed certificate courses in their subject of. This includes total 1035 learning hours and total 3796 lessons collectively.

Patel Twisha, Enrollment No. 190190113056 studying in Environmental Engineering Department achieved a gold medal in badminton girls single inter-zone tournament held on 28/10/2021 and also got selected in GTU badminton girls' team to represent GTU in AIU. The institute congratulates her and wishes her the best for a bright future.

✓ Tandel Dixit, Enrollment No.190190119126 and Tandel Aryan, Enrollment No. 200190119106 studying in Mechanical Engineering Department got selected in GTU Volleyball boy's team on 06/12/2021 and going to represent at GTU AIU Volleyball competition.

### **FACULTY CREATIVITY**

#### A poem in Gujarati

"સમી સાંજે નભ અને સાગરનો સંવાદ" નભ કહે નીરે મારા તું નભે છે આસમાની રંગોથી મારા તું શોભે છે વળતા સાગર કહે નમીને , કે મીઠા આભલાનો તને ક્યાં સાથ છે, અહિં તો મીઠાના મોજે પણ ભરી બાથ છે, કદી મળીશ ક્ષિતિજે તો કહીશ, કે રૂપ તારાનો હું આયનો બનીશ, તૃષ્ણા તારીનો હું ઘુંટડો બનીશ. એક ડગલું તું હેઠો આવજે, રંગે તારા હું રંગાઈ જઈશ.

-By Prof. S. V. Damania (Head, Mechanical Dept.)

# **STUDENTS CREATIVITY**



A Hindi Poem entitled "जरूरी है" is written by Mr. Priyank B. Mistry (Enrollment No: 180190119040) studying in 7<sup>TH</sup> semester Mechanical Engineering Department.

# जरूरी है

ख़्वाब तो सभी देखते है ख़्वाब को पूरा करना जरूरी है।

लड़ाई तो सभी करते है

लड़ाई का अंत जरूरी है।

प्यार तो सभी करते है

प्यार निभाना जरूरी है।

ज्ञान तो सब के पास होता है

ज्ञान को बाटना जरूरी है।

इंसान तो सभी होते है

इंसानियत होनी जरुरी है।

जिंदगी तो सभी जीते है

जिंदगी खुशी से जीना जरुरी है।

Ms. Prachi Trivedi Environmental Engg. Dept Enrolment no. 190190113070

#### A poem on the "Mobile days" current scenario.

એ દિવસો પણ શું દિવસો હતા મોબાઈલ વગરની દુનિયામાં સૌ જીવતા હતા.

કિંમત હતી ત્યારે સંબંધોની, જાતની હવે રહી ગઇ કક્ત એ નાના અજ્ઞાતની.

કદર હતી ત્યારે 'care' કરવા વાળાની આજે રહી ગઈ માત્ર 'share' કરવા વાળાની.

ફક્ત સ્ક્રિન પર આવી ગયા ઘણા સંબંધો, જે ક્યારેક હૈયાનો મોટો હિસ્સો હતા...

એ દિવસો પણ શું દિવસો હતા મોબાઈલ વગરની દુનિયામાં સૌ જીવતા હતા.

'ઉપકરણ' એ નાનું, 'કારણ' ધણી બાબતનું અરે ભાઈ, પંયાતિયાઓની મોટી પંયાયતનું.

નારદ કહે નારાયણ અને નર્મદના સુર વાલા શાને લાગી ગયા છે આજે સૌના હૈયાને તાળા.

એ દિવસો પણ શું દિવસો હતા મોબાઈલ વગરની દુનિયામાં સૌ જીવતા હતા.

Ms. Muskaan Ansari Electrical Engg. Dept Enrolment no. 200190109007



Canvas painting on Covid-19

Mr. Preet Patel Environmental Engg. Dept Enrolment no. 200190113518



Rentio at Gandhi Aashram, Ahemdabad



The only way of catching a train I have ever discovered is to miss the train before

Mr. Dhruvesh Bhavsar Electrical Engg. Dept.



Shiradi Ghats



Dehradun Express



Braganza Ghats

#### **INSIGHT TEAM**

# **Editor:**

Dr. Pankti Desai, Applied Science & Humanities Dept.

#### Co-editor:

Prof. Sandip Patel, Mechanical Engg. Dept.

#### Contributors:

Prof. Reshma Malan, ASH Dept.

Prof. Jugal Panchal, Mechanical Engg. Dept.

Dr. Sanjay Srivastava, Chemical Engg. Dept.

Prof. Monali Patel Environment, Engg. Dept.

Prof. Neha Patel, Civil Engg. Dept.

Prof. Dipendra Parmar, Electrical Engg. Dept.

### **Student Contributors:**

### Editorial team

Adithi Pillai,  $2^{nd}$  year, Environmental Engineering Muskaan Ansari,  $2^{nd}$  year, Electrical Engineering Riya Patel,  $1^{st}$  year, Electrical Engineering

# <u>Design team</u>

Nikhil Patel, 1<sup>st</sup> year, Electrical Engineering Nayan Varlekar, 1<sup>st</sup> year, Electrical Engineering Harshiv Surti, 1<sup>st</sup> year, Electrical Engineering Bhavin Halpati, 1<sup>st</sup> year, Electrical Engineering