



VISHWAKARMA

GOVERNMENT ENGINEERING COLLEGE

CHANDKHEDA, AHMEDABAD



VGECNews

Newsletter | January - March 2022

VISION

- To create an ecosystem for proliferation of socially responsible and technically sound engineers, innovators and entrepreneurs.

MISSION

- To develop state-of-the-art laboratories and well-equipped academic infrastructure.
- To motivate faculty and staff for qualification up-gradation, and enhancement of subject knowledge.
- To promote research, innovation and real life problem solving skills.
- To strengthen linkages with industries, academic and research organizations.
- To reinforce concern for sustainability, natural resource conservation and social responsibility.

VGECNews

Editorial Team

Dr. N. N. Bhuptani (Principal)

Dr. Vaseem Qureshi

Prof. Rozina Surani

Prof. Kamakshi Kaul

Prof. Khushali Raval

Prof. Ghanshyam Shah

Prof. Nirav Mehta

Prof. Om P. Mehta

Designed By

Umar Badi (CE)

Dhruvi Dhapre (CE)



Dr. Alpesh H. Dafda from Electronics and Communication Engineering Department has authored a book on Consumer Electronics (ISBN: 978-93-5583-019-7) for MSBTE which is published by Tech-Neo publications, Pune in March-2022.



Dr. Kiran Trivedi and his team ML4ENV from Electronics and Communication Engineering Department won the 'Hackathon - Designing A Sustainable Future Using ICTs' under climate change category organized by Telecommunication and Digital Government Regulatory Authority (TDRA).



'Industry Supported Research Laboratory' is going to be established at Chemical Engineering Department worth Rs 7.5 lakhs with the financial support of Bodal Chemicals Limited, Ahmedabad.



Parth Shah (Alumnus, Chemical Engineering Department, 2021) received the 2nd award with a cash prize of Rs. 5000/- towards selection of Abstract of Dissertation on Cleaner Production and Clean Technology under 'Interlinking of Industry, Academia and Government' event held by Gujarat Cleaner Production Cell GCPC, Gandhinagar.



Patel Satish, a student of 6th sem Electrical Engineering secured 5th rank in GTU (5th sem DEC-2021 Examination) with 9.36 CPI.



Prof Dhaval J Varia (Information Technology Department) has been awarded PhD degree for title "Ant Colony Based Architecture for Air Pollution Aware Vehicle Routing in Smart Cities using Machine Learning" by Gujarat Technological University in January, 2022.



Prof. Y B Bhavsar (Electrical Department) has been awarded PhD degree in Electrical Engineering on "Congestion management of transmission system under deregulated environment of electrical power system" from GTU in January, 2022.

Dr. Chirag N. Patel

(Applied Mechanics Department)

Published a paper titled "Identification of Reasons for Contractor Insolvency in the Indian Construction Industry" in Journal of The Institution of Engineers (India). Series A (J. Inst. Eng. India Ser. A 103,129–137 (2022) - Springer Publication. <https://doi.org/10.1007/s40030-021-00597-y>).

Prof. Dolly R. Gandhi

(Chemical Engineering Department)

Published a paper on "Naturally occurring Bentonite clay: structural augmentation, characterization and application as catalyst" at Elsevier: Materials Today Proceedings available online 25th February 2022, (in Press) <https://doi.org/10.1016/j.matpr.2022.02.346> Cite Score : 1.8.

Dr. Femina J. Patel, Dr. Parin D. Shah

(Chemical Engineering Department)

Published a paper on "A Comprehensive Review on Spinel Based Novel Catalysts for Visible Light Assisted Dye Degradation" at Elsevier: Process Safety and Environmental Protection, available online 25th February 2022, Vol. 161(2022) 703-722 <https://doi.org/10.1016/j.psep.2022.03.030> Impact factor 6.158.

Dr. Femina J. Patel

(Chemical Engineering Department)

Published a paper on "Design and development of automotive catalytic converter using non-noble catalyst for the reduction of exhaust emission: A review" at Elsevier: Materials Today: Proceedings, available online 25th February 2022, (in Press) <https://doi.org/10.1016/j.matpr.2022.03.350>.

Dr. Ujvala V. Christian and Harsh Desai

(Chemical Engineering Department)

Presented a review paper on "Bioelectrochemical Processes: An Efficient Method for Treatment of Waste Water" at 3rd edition of the National Conference on "Advances in Chemical Engineering and Science (ACES-2022)" virtual mode organized by IChE-IISER Bhopal Students' Chapter.

Kedar Joshi

(Chemical Engineering Department)

published the work on "McCabe Thiele for Binary Distillation Column" <https://www.mathworks.com/matlabcentral/fileexchange/108104-mccabe-thiele-for-binary-distillation-column>), under the MATLAB Central File Exchange.

Dr. Ujvala V. Christian and Hemendra Parmar

(Chemical Engineering Department)

Presented a research paper on "An Experimental Investigation on Cellulosic Particles Synthesis via Emulsion Solvent Evaporation Method" at 3rd edition of the National Conference on "Advances in Chemical Engineering and Science (ACES-2022)" virtual mode organized by IChE-IISER Bhopal Students' Chapter.

Dr. Pradeep P. Lodha

(Civil Engineering Department)

Published a paper titled "Impact of Mixed Forest Cover Changes on Surface Runoff: A Case Study of Upper Sabarmati River Basin" in International Conference Water, Energy and Environment (WEECON 2021), Vietnam ISBN: 978-81-954872-4-0, pp. 64.

Dr. Milap G. Nayak

(Chemical Engineering Department)

Published a paper titled 'Parametric study and optimization of microwave assisted biodiesel synthesis from Argemone Mexicana oil using response surface methodology' at Elsevier: Chemical Engineering and Processing - Process. Intensification, Volume 170, January 2022, 10866512, ISSN: 0255-27011.802 (Impact Factor: 4.237)

Prof. Avani N. Dave, Prof. Nakul R. Dave, Shivangi Gurjar, Venisha Chauhan, Mansi Suthar, Dhvani Desai, Hemali Luhar, Vishwa Patel

(Computer Engineering Department)

Published a paper titled "Digital Eye for Visually Impaired—DEVI" under Intelligent Infrastructure in Transportation and Management. Studies in Infrastructure and Control. Springer, Singapore. Part of the Studies in Infrastructure and Control book series (sic). Published on: 14th December 2021, ISBN: 978-981-16-6936-1.

Prof. Nakul R. Dave, Kishan Aghera, Jinesh Majithia

(Computer Engineering Department)

Published a paper titled "Real-Time Bus Prediction System in City Transport" under Intelligent Infrastructure in Transportation and Management. Studies in Infrastructure and Control. Springer, Singapore. Part of the Studies in Infrastructure and Control book series (sic). Published on: 14th December 2021, ISBN: 978-981-16-6936-1.

Dr. Kiran Trivedi and Harsh Shroff

(Electronics and Communication Department)

Published a paper titled "Identification of Deadliest Mosquitoes Using Wing

Beats Sound Classification on Tiny Embedded System Using Machine Learning and Edge Impulse Platform," 2021 ITU Kaleidoscope: Connecting Physical and Virtual Worlds (ITU K), 2021, pp. 1-6, doi:10.23919/ITUK53220.2021.9662116.

Dr. Kiran Trivedi and Prof. Rahul Patel
(Electronics and Communication Department)

Published a paper titled "A Comparative Study of Fake News Detection Using Natural Language Processing and Machine Learning" International Advanced Research Journal in Science, Engineering and Technology Impact Factor 7.105 Vol. 9, Issue 1, January 2022.

Dr. Alpesh H. Dafda
(Electronics and Communication Department)

Published a paper titled "A comparative and productive analysis using FPGA for implementation of video file transmission", GIS Science Journal, ISSN: 1869-9391, Vol-9, Issue-1, Page 1088-1093, Jan-2022, DOI: 20.18001.GSJ.

Prof. N. R. Prajapati, Bhavin Sharma, Umang Raval, Kevin Prajapati and Mukund Rami

(Instrumentation and Control Department)

Published a paper named "Process Automation Using PLC: A Web Server Approach" at International Advanced Research Journal in Science, Engineering and Technology, Volume 9, Issue 1, January, 2022, DOI: 10.17148/IARJSET.2022.9101, ISSN (O) 2393-8021, ISSN (P) 2394-1588 (Impact Factor: 7.105)

Prof. M. D. Khediya, Dip Thummar, Axay Patoliya

(Instrumentation and Control Department)

Published a paper named "Real Time Pest Prediction and Pest Control for Crops in Agriculture based on

Embedded System." at International Advanced Research Journal in Science, Engineering and Technology, Volume 9, Issue 1, January, 2022, DOI: 10.17148/IARJSET.2022.9120, ISSN (O) 2393-8021, ISSN (P) 2394-1588 (Impact Factor: 7.105).

Prof. M. M. Sharma, Yash Mevada, Harshwardhan Waghela and Hetanshi Pandya

(Instrumentation and Control Department)

Published a paper named "Automatic pneumatic based Stamping Machine" at International Advanced Research Journal in Science, Engineering and Technology, Volume 9, Issue 1, January, 2022, DOI: 10.17148/IARJSET.2022.9134, ISSN (O) 2393-8021, ISSN (P) 2394-1588 (Impact Factor: 7.105) Page: 197 to 202.

Prof. S. N. Shah, Prof. S. Y. Rathod, Hitarth Patel, Yash Patel, Manthan Mistry, Dharmesh Tukadiya

(Instrumentation and Control Department)

Published a paper named "Wireless Smart Water Monitoring and Quality Measurement System" at International Advanced Research Journal in Science, Engineering and Technology, Volume 9, Issue 1, January, 2022, DOI: 10.17148/IARJSET.2022.9117, ISSN (O) 2393-8021, ISSN (P) 2394-1588 (Impact Factor: 7.105) Page:107 to 110.

Prof. M. V. Patel, Kashyap Koshti, Dhara Patel, Naimish Patoliya, Meet Patel, Yash Karsaliya, Aditya Chauhan

(Instrumentation and Control Department)

Published a paper named "Real Time Classification and segregation of Cashew Nut Using Computer Vision" at International Advanced Research Journal in Science, Engineering and Technology, Volume 9, Issue 1, January, 2022, DOI: 10.17148/IARJSET.2022.9116, ISSN (O) 2393-8021, ISSN (P) 2394-1588 (Impact Factor: 7.105) Page:100 to 103.

Dr. Dhaval M. Patel

(Mechanical Engineering Department)

Published a paper titled "Study the effect of fiber laser parameter on bending stiffness of CoCr stent manufactured by fiber laser" at International Journal of Mechanical Engineering, Vol. 7 No. 1 January, 2022, ISSN: 0974-5823 (SCOPUS INDEX), Page: 5306 - 5315.

Dr Sagar Ambavale

(Science and Humanities Department)

Published a research paper titled "Influence of Long Range and Short Range Scattering Mechanisms on Electron Transport in Double Layer Graphene System" in an international journal Elsevier - Micro and Nanostructures.

Dr Vaseemahmed G. Qureshi

(Science and Humanities Department)

Published a paper titled "Dreams and their Significance in the Vision of Shakespeare and Shelley" (as a Co-author) in Research Matrix (ISSN-2321-7073) in Vol-2, Yr-9, Issue-6, in January 2022.

Presented a Paper titled "Discourse-Based Teaching for Enhancing Language Skills" in the National Conference by HMPIETR, Vallabh Vidyanagar and ELTAI during 25-26 February 2022.

Presented a Paper titled "Dreams and their Significance in the Vision of Shakespeare and Shelley" in the International Conference by Asian Social Sciences and Humanities Association during 27-29 January 2022. (As a Co-author)

Presented a Paper titled "Transgender Studies – A Brief Introduction and Its Relevance" in the International

Conference during Virtual English Literature Summit 2022 during 22-23 January 2022. (As a Co-author)

Presented a Paper titled “From Sage on the Stage to the Guide on the Side : A Teacher’s Role in Flipping the Classroom Activities for Undergraduate

Engineering Students” in the National Webinar on “Education for Better Tomorrow” organized by A G Teachers College, Ahmedabad on 21st January 2022.

Dr. Sejal H. Sarvaiya
(Science and Humanities Department)

Presented a Paper titled “Digital Multimodal Composing Activities in Second Language Learning Process: A Review” in the National Conference by HMPIETR, Vallabh Vidyanagar and ELTAI during 25-26 February 2022.

ACADEMIC COLLABORATION

Dr. Bhavin G. Buddhdev
(Applied Mechanics Department)

Delivered an expert lecture on “Environment an important aspect for survival of construction engineering organized at Shankaersinh Vaghela Institute of Technology, Gandhinagar on 3rd March, 2022.

Prof. Zoher Z. Painter
(Chemical Engineering Department)

Has been conferred as reviewer for “Journal of The Institution of Engineers (India): Series E (IEIE)” published by Springer Journal’s Editorial Office in February, 2022.

Dr. Femina Patel
(Chemical Engineering Department)

Received the certificate for guiding Mr. Parth Shah M.E. student, who received the 2nd prize award with a cash prize of Rs. 5000/- towards selection of Abstract of Dissertation on Cleaner production and Clean technology under ‘Interlinking of Industry, Academia and Government’ event held by Gujarat Cleaner Production Cell GCPC, Gandhinagar on 11th March, 2022.

Dr. Milap Nayak
(Chemical Engineering Department)
Has been conferred as reviewer for

“Journal of Taiwan Institute of Chemical Engineers” published by Elsevier in March, 2022.

Has been conferred as reviewer for “Fuel Journal” published by Elsevier in October, 2021 and received a research grant for his project entitled “Selective air oxidation of 2-choloro toluene to 2-chlorobenzaldehyde using Mn-Cu bimetallic supported on ZrO₂ and CeO₂” of Rs. 2.0 lakhs funded under STEM for 3 years.

Prof. Jashvant R. Dave
(Information Technology Department)

Delivered an expert talk on “Teaching without Teaching” at GTU & IPDC, BAPS APC - V.V. Nagar on 18th October 2021.

Dr. Chirag A. Patel
(Information Technology Department)

Delivered an expert lecture on “Cloud Computing Introduction and Demonstration of Private Cloud using Open Nebula” in online 5-day Faculty Development Program for “CLOUD COMPUTING” under the TECH SAKSHAM PROGRAM - Microsoft Azure organized by Information Technology Department, VGEC on 31st March, 2022.

Prof. N. D. Mehta
(Power Electronics Engineering Department)

Delivered an expert talk on “How to identify and nurture innovative project: Design Engineering a tool for innovation” in Department of Computer Engineering at SAL Engineering and Technical Institute on 26th February, 2022.

Dr Vaseemahmed G. Qureshi
(Science and Humanities Department)

Delivered an Expert Talk (online) on ‘Effective Communication Skills for Engineers’ at Prof Ram Meghe College of Engineering and Management, Amravati, Maharashtra on 29th January, 2022.

Dr. Kunal T Shukla
(Science and Humanities Department)

Delivered an expert talk on “Performance evaluation of Multi-Objective Optimization Solutions” in FDP sponsored under AICTE/ISTE induction / Refresher course organized by GEC, Valsad on 28th February, 2022.

NCC VGEC cadets were involved in piloting of Additional Director General of Gujarat Directorate and honorable Chief Minister of Gujarat in Vibrant Gujarat Summit on 5th January, 2022.



CIPET - IPT, Vatva, Ahmedabad scheduled a Two Week Short Term Course on "ANSYS" for the students of VGEC, Chandkheda from 3rd to 13th January, 2022. The course was sponsored by Rashtriya Uchchatar Shiksha Abhiyan (RUSA) under Gujarat Knowledge Society (GKS) & Knowledge Consortium of Gujarat (KCG). A batch of 13 students got benefitted from this course. The event was aimed at providing the basic knowledge of ANSYS software to the students. ANSYS is testing software that is being used for the training purpose. The attendees got the opportunity to do different testing on the software and learned various methods of testing using the ANSYS software. Mr. C. Raj Shekhar was the expert for the session coordinated by Prof. Rupal Vyasa of Mechanical Engineering Department, VGEC.



An expert talk on "Important Aspects of Experiential Learning" was organized by Chemical Engineering Department on 12th January, 2022 under the banner of the Indian Institute

of Chemical Engineers (IICChE) for students of Semester-6 of Chemical Engineering and IICChE student members from other Government Engineering Colleges across the Gujarat State through Microsoft Teams by Mr. Harshadkumar Patel, Commissioning Coordinator, SPIE Oil & Gas Kuwait. The talk was coordinated by Dr. Ujvala Christian. The main idea of this expert talk was to create an understanding of experiential learning among students and to develop competency through experiential learning and apply it to resolve technical problems of Chemical and allied industries. The major points discussed were Concept of Lock out and Tag Out, Styles of Experiential learning, Skill v/s Will, Resolving technical problems through experiential learning, with importance of competency development. 70 students and faculty benefitted from it.



To save the birds from getting trapped and losing their lives during festival, NSS VGEC took certain initiatives from 13th January to 17th January, 2022:

- Collected manjas/threads used to fly kites from nearby trees and poles.
- Phone numbers of NGOs working for animals and Veterinarian were shared through social media platforms to make sure availability of necessary medical help in case of any injuries to birds.
- Awareness was created among students to not use highly glassed threads/manjha and avoid flying kites in the evening.



"Planting a tree is not enough, nurturing it makes it complete".

Spreading the message of Environment Conservation NSS VGEC organized a 'Tree Maintenance Drive' on 26th January, 2022. The drive was aimed at maintaining trees and plants in College Campus by removing weeds, checking for diseases, adding compost and watering them. 15 faculty and students participated in this drive, initiated by the Principal's message on importance of nature conservation.



An expert talk on "Introduction of Process Industries" was organized by Chemical Engineering Department on 29th January, 2022 under the banner of the Indian Institute of Chemical Engineers (IICChE) for students of Chemical Engineering and IICChE student members from other Government Engineering Colleges across the Gujarat State through Microsoft Teams by Shri Mani Bhusan Thakur, Discipline Lead (Process), L & T Technology Services Ltd., Vadodara-Gujarat. The talk was coordinated by Dr. Ujvala Christian and Prof. Shuchen B Thakore with the objective to understand importance of

chemical process industries, principle and rule of thumb for chemical process via unit operations aspects and unit processes aspects. The major points discussed were role of Chemical Engineer in Process Industries, selection criteria for plant location and layout, importance of process equipment design concepts as a process engineer, applications of advanced technology in chemical process industries. 180 students and faculty benefitted from it.

The combined **Annual Training Camp** was organized on 8th February, 2022 for **Cadets of NCC** at group head quarters, Ahmedabad, to improve personality and strength of the cadets. Training on firing, weapon training, maps reading, Field Craft & Battle Craft lectures are arranged to boost the confidence of cadets and make them army ready. NCC VGEC Cadets also participated in this camp.



NSS VGEC organized a workshop to spread awareness in the society about importance of **Rain Water Harvesting** on 15th February, 2022. Every year, India receives monsoon rainfall, but we capture less than 10% of it. This is one of the main reasons why more than 70% of our country's groundwater aquifers have run dry as we are only extracting water from the ground and not harvesting water back in it. This water crisis is impacting more than 60 crore people across India. By 2030, India's water demand is projected to be

twice the available supply. In this workshop demonstration on various methods of Rain Water Harvesting were showed. NSS VGEC also shared information by the medium of blogs. "Let's harvest rain water and let's become independent for our water needs".



On 24th February, 2022, in the opening ceremony of **Drone Flying and Horse Riding Courses**, Cadets of **NCC VGEC**, were involved in piloting of Home Minister Shree Harsh Sanghvi at Gujarat Technological University.



An expert talk on **"GATE, Career Opportunities & Internship"** was organized on 5th March, 2022 by Chemical Engineering Department under the banner of the ChEA chapter for students of Semester- 4 and 6 of Chemical Engineering through Hybrid mode using Microsoft Teams by Shri Shailesh Chaudhary. Center Head, I.C.E. GATE Institute, Ahmedabad. The talk was coordinated by Prof. Shuchen B Thakore with the objective was to acquaint students with numerous opportunities after passing GATE Exam. The important points dealt include importance of GATE examination and eligibility of GATE score in various PSU sectors the outcome of the talk was the students got aware of various opportunities after completion of

degree. 55 students and faculty benefitted from it.



An awareness session on **"Smart India Hackathon-2022"** was conducted by the Chemical Engineering Department on 9th March, 2022 under the Student startup for innovative policy (SSIP) The event was coordinated by Dr. Milap G. Nayak for semester 6,8, and ME students. The event aimed at discussion on the necessary information for SIH-2022 event and to create the awareness among the student group for "Smart India Hackathon", discuss the important instruction regarding participation in the event, formation of group, and selection of problem statement, encourages students to come out with the innovative ideas and convert their technical strength into the feasible outcome. The outcome of the event was students got aware of selection of problem statement, formation of team, and internal Hackathon scrutiny at institute level on 25th March, 2022. Students have shown the interest in participation of SIH-2022.



NSS VGEC organized a seven-day **Special Camp** under the leadership of Dr. Alpesh Dafda (NSS-PO, VGEC) from 22nd March to 28th March, 2022 at Adalaj village of Gandhinagar district.

Rainwater Harvesting was the core focus of the Special Camp which included a variety of additional activities for the welfare and development of the village people. Activities carried out under Special Camp 2022

- Village survey
- Awareness on Government Policies and preparation of documents. (Aadhar card, Maa card, etc.)
- Health and Eye Check-up Camp
- National Voter awareness workshop
- Importance of Physical Education and Sports Day
- Rally on Waste Management and workshop on Solid waste management
- Rainwater Harvesting
- Self-Defense workshop



An Expert evaluation of “**Smart India Hackathon-2022**” was conducted by the Chemical Engineering Department in line with the college level schedule on 25th March, 2022. One team has participated in the event. The event was coordinated by Dr. Milap G. Nayak with the objective to showcase the solution for the problem statement on “Waste segregation and disposal” for SIH-2022 event and evaluate the problem solution of the team by the invited jury. Team members have discussed the use of plasma pyrolysis for the disintegration of waste including the medical waste, plastic, and the other type of waste such as vacuum residue of the refinery. Jury member Dr. Supritam Dutta, Associate Prof. Chemical Engineering, L.D. College of Engineering, Ahmedabad evaluated on the role of plasma in waste mitigation, fabrication of plasma pyrolysis system. Jury member Prof. Amar Vaghela, Associate Prof. Chemical Engineering L.D. College of Engineering, Ahmedabad evaluated on the techno economic viability of the proposed solution.



Women Development Cell, VGEC – Chandkheda organized an expert talk on “**Entrepreneurs - as Innovators and Change Makers**”, on 28th March, 2022 at A-block Auditorium. Ms. Hetal Amin President of Kalyani Sahasik Mahila Vikas Sangh, Chairperson of Ahmedabad chamber of commerce welfare foundation) was the expert invited for this talk. 180 participants attended this session. Ms. Hetal had discussed Entrepreneurs' skills and Role of Entrepreneurs to boost up an Indian economy cited with real examples, risk factors involved in a new venture set up, and believing in oneself to get the success.



STUDENT CHAPTERS

With a view to promoting the startup ecosystem, VGEC organized the institute level **Hackathon** on 25th March, 2022 at the institute premises in offline mode to scrutinize the teams that will participate for the nation level hackathon event. Both Software and Hardware editions of interdisciplinary and disciplinary projects were demonstrated during the internal Hackathon. Innovative and out of the box solutions were proposed and presented by the students to the experts. Students got the opportunity to interact with the experts and during the interaction, the teams were given valuable and constructive feedback that could enhance their proposed solutions. 65 Teams including 390 students participated in the event. Dr. K. R. Trivedi and Prof. Divyesh Vaghela coordinated the event.



Vishwakarma Government Engineering College, Chandkheda organized the event on **SSIP 2.0 policy implementation and its introduction to SSIP Grantees** of the state to celebrate the start-up week on 13th January, 2022 on virtual platforms -Microsoft Teams and Zoom with around 400 participants including faculty members and students. The event flagged off with the inaugural session addressed by Shri. S. J. Haider, Principal Secretary, Education Department, Government of Gujarat, where he emphasized on the benefits of the new policy SSIP 2.0 to the Universities, Institutes and Schools of Gujarat and how the Government of Gujarat is striving its best in the field of innovation and Startups. The new policy is one of its kind with extended support to School students, alumni and drop outs. Prof. Milap Nayak, Prof. Amit Rathod and Prof. Kalpesh Chaudhary coordinated the event.



Under **MISSION ENGLISH**, Dr Vaseemahmed Qureshi conducted an online session on “Enhancing Language Skills” on 13th January, 2022 in which 92 students took part.

IEEE VGEC Student Branch organized a **"CAREER PE CHARCHA"** two-day event to provide guidance and knowledge to the newly entered students in engineering on 8th and 9th January, 2022. This was an online event free for all organized on MS TEAMS. Training and Placement Officers of VGEC and ALUMNI'S (who are currently working in the multinational companies like Google & Amazon) were present as experts. A total of 305 participants participated in this event. The objective of this event was to inform about a variety of career scopes in the future. Adequate skill sets are required to stand out differently from others and prove your worth in any placement field. To get the students to know about the placement process held at VGEC and the required conditions to get eligible for placement in any field of engineering as well appropriate skills,

talents, and tips required to nail the placements from various companies successfully.

The **Civil Engineering Department** organized an Expert lecture under IEI **VGEC students** chapter on **"Importance and Application of Soft Computing Techniques"** on 28th March, 2022. 73 third year students attended the session. Expert lecture was delivered by Dr H. R. Varia, Professor and Head, Civil and Infrastructure Engineering Department, Adani Institute of Infrastructure Engineering, Ahmedabad. Basic information about soft computing techniques like Fuzzy logic and its application Artificial neural network (ANN) and its application, Genetic algorithm (GA) and its application, were covered.



COLLEGE EVENTS / ACTIVITIES

The **Electronics & Communication Engineering** Department had organized an expert talk on **“Big Data Computing in Wireless Sensor Application”** on 25th January, 2022 from 11:00 AM to 12:30 PM. The main objective for this expert talk was to explore big data and its computing requirement for wireless sensor application.

An Alumni interaction on **“SUEZ Industry Experience and Preparation for Campus”** was organized by the **Chemical Engineering Department** under the Alumni Event, through the online platform of Microsoft Teams by Miss Ekta Chavda (2019 pass-out

alumnus) Engineer, SUEZ Water Technologies and Solution, Jamnagar, coordinated by Dr. Milap G. Nayak and Prof. Jay. B. Trivedi, to create awareness of work culture and core area of SUEZ industries, discuss the eligibility criteria, screen test, and selection procedure at SUEZ industry, make students aware about question framework, materials to be used, preparation strategies, and how to express in the interview. The participants understood key area of SUEZ industries, got aware of exam pattern and selection procedure as an intern in the industry, challenges and opportunity as an engineer in the SUEZ

industry. Students interacted with the alumni regarding Company's collaboration, work culture, and career opportunity in SUEZ industry. 103 students got benefitted from it. The event was organized on 29th January, 2022.



An interactive webinar on **“The Higher Study and Research Fellowship opportunity at CANADA”** was organized by the **Power Electronics Engineering Department** on 2nd February, 2022 from 11:00 A.M. to 12:00 P.M. for undergraduate students. The prime objective of this webinar was to make the students aware of opportunities regarding higher studies & research fellowship in Canada and process related to it.

The **Computer Engineering Department** organized an Online Workshop on **“Entrepreneurship Skill, Attitude and Behavior Development”** by Mr. Balkrishna Agarwal (Founder of Tezi.app and Co-founder of unmaskyour smile.in) on 5th February 2022 and 103 participants took benefit of it.

The **Mechanical Department** organized a workshop on **“Prototyping for Product Development using 3D Printing”** on 5th February, 2022 for the students of all departments. Prof. Dhaval B. Patel Assistant Professor Mechanical Department was the instructor of the session which benefited 60 students.

The **Power Electronics Department** arranged the awareness session on **“Creating health and Tobacco free Environment in Educational Institute”** to understand ill effects of consuming tobacco through the Life Lesson by HDH Pramukh Swami Maharaj through his one of the video. 58 students and 2 faculty members of the 5 Institutes have participated in the event. Out of 60 participants 59 agreed to be a volunteer in creating a health and Tobacco free environment in the education institute and took a Pledge for Life that they will never touch cigarette, bidi, gutka, pan masala, hookah, cigarette, or any tobacco product in one's life and will also encourage one's family, friends, and others around them not to do so. The

event was organized during 8th - 28th February, 2022.

The **Civil Engineering Department** has organized a webinar on **“Career Opportunities after Engineering”** on 15th February, 2022. Mr. Ravi Kiran Doiphode senior faculty member of ACE Engineering Academy, Pune was speaker for the session. The webinar was organized for third-year students to make them aware about career options after Engineering. 55 students attended the webinar.

The **Instrumentation and Control Department**, with an objective to fulfill the curriculum gap in an elective subject named Industry 4.0 offered for 6th semester students, organized an expert lecture on **“The Role of Cloud Computing in Industry 4.0”**, on 17th February, 2022. The expert for the session was Prof. (Dr.) C. S. Thaker, Head of Computer Engineering Department, GEC, Rajkot. The session was conducted online on Microsoft Teams with 31 students benefiting out of it. The event was coordinated by Prof. M. M. Sharma

An Alumni interaction on **“Overview of Refinery and Petrochemical units”** was organized on 19th February, 2022 by the **Chemical Engineering Department** under the Alumni Event, through the online platform of Microsoft Teams by Shri Sachin Sakariya (2010 pass-out alumnus) Senior Manager, Central Technical Services, CPP/Utilities-Energy Management, Reliance Industries Ltd. Jamnagar, coordinated by Dr. Milap G. Nayak and Prof. Jay. B. Trivedi, to discuss the role of chemical engineer in refinery, the various unit operations and process involved in the Reliance industries Ltd., Jamnagar and make students aware about the objective of every refining and petrochemical units and their inter-linkage in the industries. It also aimed to strengthen the bond between

alumni and the department. The participants understood the importance of strategic location of Reliance industry, the sequence of refining and petrochemical units, challenges and opportunity as an engineer in the Reliance industry, plant safety and environment aspect in Refining units. 121 students got benefitted from it.

On 22nd February, 2022, the **Information Technology Department** organized a webinar on **“Architectural insights on state of the art big data processing and analysis framework”** by Dr. Sumit Kalra, Assistant Professor, IIT Jodhpur, through online platform. Dr. Sumit Kalra, is an expert on big data processing, IOT, software framework, who gave very enriching insights over his expertise. The objective of the event was to provide an idea of the current scenario of the world which is affected by big data. Following points were discussed like Importance of Big data in our world today. Understanding the possible solutions for solving the problem of big data. Role of the next generation in solving the unsolved problems related to big data.

Academic Visit at Science City, Ahmedabad was organized by Computer Engineering Department on 22nd and 23rd February, 2022 on **“Building A Climate Resilient Gujarat”** Exhibition, was organized in which 61 participants participated. Students learned about the upcoming market of E-vehicles in Gujarat, reusable product preparation to move towards zero waste for industry and society. Acquired awareness about Industry 4.0 and got familiar with inter disciplinary startups.



On 22nd and 23rd February 2022, Electrical Engineering Department VGECH, Chandkheda organized a visit at science city on Building a Climate-Resilient Gujarat Exhibition along with **Prof. Rozina Surani, Prof. Minaxi Patel, Prof. Jignasha Prajapati, and Prof. Nilam Panchal**. 21 students have visited this exhibition. Students learnt about usage of electric vehicles which reduces the usage of petrol and diesel which can help to reduce air pollution and Greenhouse Gases.



The **Information Technology Department** under the **SSIP** organized a webinar on **“Start-Up talk on GreenoBazaar”**. The webinar was conducted on 5th March, 2022 by the expert Mr. Rajan Patel (Founder & CEO GreenoBazaar, Ahmedabad). The webinar was attended by 70 students of various departments of VGECH, Chandkheda. The main purpose of the webinar was to make students aware about innovation, start-Ups and entrepreneurship, validation of idea and scale of its extension, new entrepreneurial ideas in current time, the fundamental resources to own and run a start-up, also key facts and various hurdles in the business are also briefed with case studies.

The **Electrical Engineering Department** organized a webinar on **“Career Opportunities after B.Tech”** on 7th March, 2022. Mr. S. M. Trinath (Motivational Speaker & Faculty at ACE Academy) was the speaker of the session and had discussed the important career opportunities for engineering graduates (GATE, ESE, PSUs

Jobs, State Service Commission, IT / Private sector Jobs) and the strategy for competitive exam preparation. More than 50 students had participated in the webinar. The event was coordinated by Prof. Rozina Surani.

Instrumentation and Control Department with an objective to fulfill the curriculum gap in an elective subject offered in the department for 6th semester students, named Industry 4.0, organized an expert lecture on **“Industrial IoT and Automation”**, on 7th March, 2022. Prof. (Dr.) B. V. Budhdhadev, Retired, Computer Engineering Department, GEC, Gandhinagar, currently working as Chief Technical Mentor at Lookman Electroplast, was the speaker for the session, which was conducted in both online (MS Teams platform) and offline mode. The session, coordinated by Prof. M. M. Sharma was attended by 65 offline and 35 online participants.

The existence of real learning beyond the four walls of the classroom, with this objective industrial visit, was organized for the student members of **IICHE** student chapter on 16th March, 2022. Total 25 student members of IICHE Student Chapter of Chemical Engineering Department VGECH along with faculty coordinator Dr. Ujvala Christian. At S.S.S. Pharmachem, Opp. Harsha Engineering, S-B Road, Changodar, Dist: Ahmedabad-382213, Gujarat, students got the opportunity to interact with plant personnel who explained the production process, working of different process equipment in detail. Students were taken through the industrial premises to gain practical experience and knowledge of active pharmaceutical ingredient (API) production processes, the final finished product (i.e. in tablet, granules and powder, gel, spray form) manufacturing and packaging, and good manufacturing practices implemented by the unit.



The existence of real learning beyond the four walls of the classroom, with this objective industrial visit, was organized for the student members of **IICHE** student chapter on 16th March, 2022. Total 25 student members of IICHE Student Chapter of Chemical Engineering Department VGECH along with faculty coordinator Dr. Ujvala Christian. At Macropolymers Pvt. Ltd., Unit-II Maha Gujarat Industrial Estate, Opp. Nova Petrochem, Sarkhej - Bavla Road, PO : Moraiya, Ta: Sanand, Dist: Ahmedabad-382213, Gujarat, HR Manager explained about introduction and company's policy regarding safety and environment management. Students got the opportunity to interact with process engineers at the plant who explained the production process, working of process equipment in detail. The importance of process safety rules and regulations was also conveyed to students. At Research and Development Laboratory students understand about different test for characterization of polymeric resins and analytical techniques used.



Instrumentation and Control Department with an objective to fulfill the curriculum gap in an elective subject offered in the department for

6th semester students, named Industry 4.0, organized an expert lecture on **“The Smart Cities – Digital Solution for Future Livelihood”**, on 8th March, 2022. Prof. (Dr.) B. V. Budhdhadev, Retired, Computer Engineering Department, GEC, Gandhinagar, currently working as Chief Technical Mentor at Lookman Electroplast, was the speaker for the session, which was conducted in both online (MS Teams platform) and offline mode. The session, coordinated by Prof. M. M. Sharma was attended by 60 offline and 45 online participants.

Prof. D. B. Patel from **Mechanical Engineering Department** VGEC had delivered a lecture on **“3D Printing in Civil Engineering”** at Civil Engineering Department, VGEC on 11th March, 2022, in which 30 students participated. He delivered information about 3D printing scopes in Civil Engineering, history of 3D printing, modern technology used in it as well as its scopes and challenges in near future.



On 22nd March, 2022, World Water day **Civil Engineering Department** has organized a **“Poster Competition”** in which 55 students participated. Jayvik Solanki, Semester 4 student of Mechanical Department stood first. Shraddha Thorat, Semester 2 student of, Civil Department stood second. Manpreet Kaur Nayyar, semester 4 student of Electronics and Communication department and Punit

Mistry semester 4 student of Chemical department stood third.

Department of Electronics and Communication Engineering organized a one day Industrial Visit at e-Infochips Ltd. for 6th Semester BE students on 22nd March, 2022. Around 50 students and 2 faculties Prof. Jayesh Diwan and Prof. Shreeji Sheth visited the e-Infochips, Ognaj office. Students got technology capsules about ASIC and Product engineering services and career perspectives in these domains followed by visiting an experience zone having live demo projects e-Infochips has worked on. Students also explored business verticals and technology horizontals e-Infochips is working for. It was a motivating visit giving students an inclination and idea of real work being done in the core electronics industry.



Dr. Alpesh H. Dafda, conducted an open to all demonstration of **“NavIC-Navigation with Indian constellation”** on 22nd March, 2022 in F-210 Lab of Electronics and Communication Department, VGEC.



On 22nd March, 2022, World Water day **Civil Engineering Department**

organized a **“Talk Show on Ground Water”** at the Civil Engineering Department, VGEC. Around 40 students attended the talk show. Importance of ground water recharge, water quality, Water Scarcity, etc was being discussed.



Computer Engineering Department organized an Industrial visit on 29th March, 2022 to visit **e-Infochips Private Limited**, Ahmedabad. 50 students of semester - 6 have participated in this visit. They explored the technical establishment of the company with demonstration of various innovative product.



The **Information Technology Department** organized an expert talk on **“Machine Learning and AI in Healthcare”** by an expert Mr. Abbas Dhilawala, Chief Technology Officer, Galen Data, Houston , Texas in online mode. The Expert discussed topics like Importance of Machine learning in the medical field, AI Case study – Drug Discovery and trial, Future of machine learning and Artificial intelligence. 89 students participated in the program. The event was organized on 21st March, 2022.

A memorandum of understanding (MoU) was signed between Chemical Engineering Department, VGEC and The

Green Environment Services Co-op. Society Ltd. (Common Effluent Treatment Plant and Secured Landfill Facility), Vatva, Ahmedabad.

A memorandum of understanding (MoU) was signed between between

Chemical Engineering Department, VGEC and Bodal Chemicals Limited, Ahmedabad.

A memorandum of understanding (MoU) was signed between Chemical Engineering Department, VGEC and

SVNIT, Surat for the combined research work of Dr. M.G. Nayak (PI) and Dr. V. N. Lad (PC) for the STEM sponsored research in the field of oxidation of ortho chlorotoluene to ortho chlorobenzaldehyde.

FACULTY DEVELOPMENT

Dr. Yamini J. Patel

(Applied Mechanics Department)

Completed a course on "Study of Ancient Indian Science and Technology" organized by GTU in association with Bhisma School of Industries.

Dr. Chirag N. Patel

(Applied Mechanics Department)

Participated in online STTP "Application of Optimization, Soft Computing, Modeling with GIS in Engineering and Technology (AOSCMGET-2022)" organized by Department of Civil Engineering, L. D. College of Engineering, Ahmedabad.

Prof. Mukesh V. Chauhan

(Applied Mechanics Department)

Participated and completed the One week (6-Days) Online Short Term Training Program (STTP) on "New Trends in Concrete Technology" organized by Department of Civil Engineering, Sankalchand Patel College of Engineering, Visnagar.

Dr. Milap G. Nayak

(Chemical Engineering Department)

Attended the "Nanotechnology and Nonmaterials for Various Technological Applications" training organized by online mode by NITTTR, Bhopal, M.P., India.

Prof. Jay B. Trivedi

(Chemical Engineering Department)

Attended the "Induction Phase-II" training organized by online mode by NITTTR, Bhopal, M.P., India.

Prof. Bhagyesh C. Contractor

(Civil Engineering Department)

Participated in online STTP "Application of Optimization, Soft Computing, Modeling with GIS in Engineering and Technology (AOSCMGET-2022)" organized by Department of Civil Engineering, L. D. College of Engineering, Ahmedabad.

Prof. Kaushik Rana

(Computer Engineering Department)

Participated in Faculty Development Program "Designing of Question Papers" organized by NITTTR, Bhopal, M.P., India.

Prof. N. P. Shah

(Electrical Engineering Department)

Participated in a one week online event on "Enhancing Emotional Intelligence", from 21st to 25th February, 2022, organized by Jaipur engineering college and Research Center, Jaipur.

Prof. R. R. Surani

(Electrical Engineering Department)

Attended Short term course on "Condition Monitoring of Power Apparatus adopting Multi Sensor Fusion Technique" from 28th February

to 5th March 2022, organized by IIT, Madras and sponsored by AICTE.

Prof. N. P. Patel

(Electronics & communication Engineering)

Participated in Faculty Development Program "Design Engineering - Level 1" organized by the Design Innovation Center of Gujarat Technological University.

Dr. Alpesh H. Dafda

(Electronics & Communication Engineering)

Participated in "2022 International Workshop on Advances in Antennas & Microwave Technologies- Challenges & Opportunities (Roadmap towards Self-Reliance)" organized on 16th March, 2022 at Space Applications Center, ISRO, Ahmedabad.

Prof. Dhaval J. Varia

(Information Technology)

Participated in Faculty Development Program "Design And Development Of IOT (Internet Of Things) Application by NITTTR, Bhopal.

Prof. P. S. Tirkar

(Instrumentation and Control Engineering Department)

Participated in Faculty Development Program 'Teaching without Teaching' organized by Gujarat Technological University in association with IPDC Team on 21st October, 2021.

Prof. N. D. Mehta
(Power Electronics Engineering Department)

Participated in a one week training on "Power Electronics and its Control in Electrical Mobility and Energy Storage" organized by College of Engineering , Pune in association with AICTE Training And Learning (ATAL) Academy, New Delhi.

Participated in a one week training on "Electrical Charging station for Vehicle" organized by Government Engineering College, Thrissur in association with AICTE Training And Learning (ATAL) Academy, New Delhi.

Dr. Sejal H. Sarvaiya
(Science and Humanities Department)

Participated in 1 Week training on 'Technology Enabled Teaching and Learning' organized by NITTTR Bhopal from 28th March to 1st April, 2022.

Prof. Snehal R. Paladiya
(Science and Humanities Department)

Participated in 1 Week training on 'Technology Enabled Teaching and Learning' organized by NITTTR Bhopal from 28th March to 1st April, 2022.

Dr Vaseemahmed G. Qureshi
(Science and Humanities Department)

Has been attending MOOC on Technical English for Engineers by NPTEL during February to April, 2022..

Dr K. T. Shukla
(Science and Humanities Department)

Participated in Faculty Development Program "Multi-Objective Optimization" sponsored under AICTE/ISTE induction / Refresher course organized by GEC, Valsad from 22nd to 28th February, 2022.

Prof. Mohani R. Tiwari
(Science and Humanities Department)

Participated in 1 Week training on 'Technology Enabled Teaching and Learning' organized by NITTTR Bhopal from 28th March to 1st April, 2022.

STUDENT ACHIEVEMENT

Yug Gajjar from Electronics & Communication Department accepted into Prof. Ahmed E. Hassan's research lab.

Varun Shah from Electronics & Communication Department selected in GTU MOTORSPORTS.

Yaksh Bhesaniya student of 4th semester received a Gold Medal for standing first in Diploma Engineering in Information Technology from Gujarat Technological University

Prit Manvar and **Dhara Solanki** from Computer Engineering Department got selected among top 10 teams to be participating in Smart India Hackathon representing Vishwakarma Government Engineering College, Chandkheda, in Internal Hackathon organized by SSIP Cell.























Deven Mistry, Mangaliya Manish, Gadani Meet, Sukhadiya Het, Modi Yogini, Parmar Himanshu from Electrical Engineering Department were selected in electrical engineering branch among top 10 teams to be participating in smart india Hackathon 2022 representing Vishwakarma Government Engineering College, Chandkheda in internal hackathon organized by SSIP cell. Name of Team: CyberHex. Developed a drone for anti-drone system.



Amit Verma, Dimple Ramvani, Prachi Seth, Dhruv Sindha, Kaushal Khaneja and Vishakh Patel from Instrumentation & Control Department were selected in Instrumentation and Control Branch among top 10 teams to be participating in Smart India Hackathon representing Vishwakarma Government Engineering College, Chandkheda, in Internal Hackathon organized by SSIP Cell. Name of Team: BOT ARMY. Developed an AI based Chatbot for student section related queries.



GATE Achievers

 AIR : 128 Karm Patel (CE) GATE Score : 820	 AIR : 259 Aashay Shah (CE) GATE Score : 771	 AIR : 325 Divyesh Tripathi (IT) GATE Score : 754	 AIR : 521 Dishang Patel (IT) GATE Score : 710	 AIR : 1525 Umang Patel (Mech) GATE Score : 661	 AIR : 603 Aasharey Patel (EC) GATE Score : 617	 AIR : 2717 Rohit Jangid (EE) GATE Score : 560	 AIR : 2538 Taksh Patel (CE) GATE Score : 525	 AIR : 580 Parth Darji (Chem) GATE Score : 524	 AIR : 2718 Rushi Patel (CE) GATE Score : 517	 AIR : 2799 Aayush Jain (CE) GATE Score : 512
 AIR : 774 Raj Patel (Chem) GATE Score : 482	 AIR : 6033 Nisarg Patel (Civil) GATE Score : 462	 AIR : 967 Utkarsh Shukla (Chem) GATE Score : 451	 AIR : 7052 Dikshansh Singh (Civil) GATE Score : 439	 AIR : 3856 Mahimna Bhatt (EC) GATE Score : 429	 AIR : 6010 Shailesh Jesrani (EE) GATE Score : 425	 AIR : 6129 Sarvesh Bhagwe (EC) GATE Score : 396	 AIR : 5674 Navin Pandey (EC) GATE Score : 383	 AIR : 2097 Dharam Patel (Chem) GATE Score : 340	 AIR : 2169 Dweep Modi (Chem) GATE Score : 335	 AIR : 2296 Dinesh Haryani (EE) GATE Score : 315

ALUMNI CORNER

Kishan Manubhai Mendapara
(Alumnus IC, 2020) developed a knowledge sharing website for Industrial Instrumentation and Automation named "WOIN - World of Instrumentation", to bridge the gap

between Industry and Academia. Presently he is working as Instrumentation and control engineer in Oil and Gas sector at S mark Engineering PVT LTD, Thaltej, Ahmedabad.

Website link:

<https://worldofinstrumentation.com/>
Linkedin Profile: www.linkedin.com/in/kishan-mendapara-woin

LinkedIn Group: <https://www.linkedin.com/groups/13938242/>

VGEC has helped me understand who I am as a person. In addition to learning about engineering, NSS gave me a platform to explore the world and become solution oriented. VGEC has given me a safe space to become a part of innovation ecosystem of our nation.



- Saloni Parikh
(Alumna, EC, 2019)

Mahatma Gandhi National Fellow at IIM Bangalore
(Ministry of Skill Development and Entrepreneurship, GoI)

I still can remember the nervousness while getting into VGEC. "It is people who make the journey beautiful" and I am fortunate enough that VGEC gave me lifelong friends and a platform to develop leadership skills.



- Kaushal Gopani
(Alumnus, EE 2019)
Functional Analyst, Credit Suisse
(Investment Bank)

Dia Raval
Sem1, IC



Shraddha Thorat
Sem1, Civil



Bhargav Sonvane
Sem4, Civil



Khushi Mahajan
Sem6, Civil



Chetankumar Hadiya
Alumni IC, 2019



Aditya Patini
Sem1, Civil



Moksha Shah
Sem6, IC



Sakshi Patel
Sem1, CE



PLACEMENT UPDATES (Jan-Mar 2022)

TCS

CE-16, IT-1, EC-6, EE-1,
IC-3

Adani Group

CE-1, EC-2, EE-9, IC-1,
CHEM-9, MECH-2,
CIVIL-4

Amrut

EC-1, EE-6, IC-5,
MECH-1, CIVIL-1

Simform

CE-13, IT-10, EC-1

Reliance

EE-6, IC-4, CHEM-1,
CIVIL-5

Tatvasoft

CE-2, IT-15, EC-4

e-infochip

EC-15, IC-5

Torrent Power

EE-7

Maruti Techlab

CE-5, IT-1

Vedant

EE-6

Byjus

CE-1, EE-1, MECH-1,
CIVIL-1

PCB Planet

EC-1, EE-4

Juspay

CE-1, IT-1, EC-1

Atlas Copco

EE-3

Soda in Mind

CE-1, IT-1

VI

EC-2

Anmex Infotech

CE-1

Decimal Point

CE-1

Alpha-Numero

EC-1

Singularity

EC-1

TechVerito

CE-1

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