# Resonance@GDEC

# 72nd Republic Day Celebration





On 26th January, 1950, the constitution of India was signed and India was declared a republic. It's a day, which every Indian is proud of. With the same pride, 72nd Republic day was celebrated at GIDC Degree Engineering College, Abrama, by trustee member, principal, teaching, non-teaching, supporting staff and students.

The event started with the ceremony of hosting the Indian National flag by our honourable trustee member Dr. A.K.Dave. After the introductory words about Republic Day by Prof. Ishita Panchal and Principal Dr. N. D. Sharma welcomed trustee member Dr. A.K.Dave. Our trustee sir has reminded everyone of the responsibilities they have on their shoulders to make the country proud. Sir has advised to understand the importance of commemoration of Republic day and how they can make changes in the world, for coming future. The programme concluded with thanking note followed by the distribution of sweets to staff and students.

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## **GDEC Team**

Prof. Dr. Neeraj. D. Sharma, Principal

**Prof. Dr. Hiralal S. Patil,** Head, Mechanical Engg. Dept.

**Prof. Dr. Shailesh. S. Patel,** Head, Applied Sci. & Huma. Dept.

**Prof. Dr. Rakesh. J. Motiyani,** Head, Electrical Engg. Dept.

**Prof. Dr. Bhavin G. Patel,** Head, Civil Engg. Dept.

**Prof. Archana Nayak,** Head, Computer Engg. Dept.

**Prof. Toral Patel,** Head, Automobile Engg. Dept.

## **Editorial Team**

- Prof. Archana M. Nayak
- Prof. Bhumika H. Patel
- Prof. Kushal D. Patel
- Mr. Nilesh G. Patel

# **International Yoga Day Celebration - 2021**





GIDC Degree Engineering College, Abrama enthusiastically celebrated 7th International Yoga day, at GDEC Campus on 21st June, 2021. Many staff took part in this celebration and practiced YOGA. This year due to pandemic situation, college has celebrated Yoga day virtually for students. The day was chosen as it's the longest day of the calendar year, a day connected with Sun, light and nature and not a day of personal importance. The program was conducted using common YOGA protocol. All yoga asanas produce a feeling of lightness, ease relaxation.

# **Principal Message**

Hope all of you might have come out from direct or indirect effects of Covid -19. Really it was terrific time for we all, where everyone of us might have learned many lessons of life and experienced several undesirable sequences. Institute would like to extend its deepest sympathy for all who have lost anything in this hard time.

Along with all other sectors of life ,this pandemic and its extensive shadow has also affected education sector across the world ranging from a school level child to scholar of University. Many facet of education, paradigm have sensed the need of incorporating an advanced patterns of online mode of education which was not that much convenient initially despite of that education fraternity has proved to true by its efficiency and nowhere allowed to struck the education and its flow. Students and parents have also faced lots of inconvenience and problems during this period. Many regions were not well facilitated with internet facility and had network issues, despite of that students have not loss their courage and continue education. University has also extended its most supportive approach for students and institutes.

Now, a hope of ray has been experiencing since couple of weeks where country is looking for the hope of the things to be normal as soon as possible. Our next required move should be towards commitment for bringing the flow of education in its natural pace and nurturing it with our gained experience of online education. We may say that with leaving lots of bitter footprints, this Covid-19 has also instilled some novel aspects and opportunities which we might be overlooking in our regular pattern.

I would like to congratulate all outgoing students from institute and wishing them best wishes on behalf of the institute for their best career. You all have learned a novel experience during your student life apart from study that how to tackle such annoying situation so looking positively it was hard training as well as hard internship for you all. May its positive outcome in form of capacity building will be reflected in your future endeavours

Wishing you all happy, healthy and safe time ahead.

Dr. Neeraj D. Sharma

# **Dynamic Management**

Name of the Member	Designation in the GES	Current Position/Organization		
Shri M. Thennarasan, IAS	Chairperson	Hon. Vice Chairman & Managing Director , GIDC, Gandhinagar		
Shri B. C. Warli (B.E Civil)	Member Secretary	I/c.Director (Notified Area), I/c. Chief Engineer & Superintending Engineer (Public Health) & I/c. Superintending Engineer (Project) GIDC, Gandhinagar		
Shri N. P. Vadalia (B.E Civil)	Member	I/c. Superintending Engineer-Surat ,Executive Engineer-Surat		
Dr. V. S. Purani (M.E Civil, Ph. D.)	Member	Principal, GEC, Valsad		
Smt. Harshaben H. Naik (Bachelor of Arts with Ecomomics)	Member	Social Worker and Ex Chairperson, Gujarat Women Economic Develpoment Corporation LTD., Govt of Gujarat.		
Shri. Sanjay I. Desai(B.E. Civil)	Member	Syndicate Member, VNSGU, Surat & Consulting Engineer		
Shri Hiren R. Vepari Chartered Accountant (CA)	Member	Practicing Chartered Accountant		
Ar. Shivarao R. Channapattan B.Arch., M.Arch(Urban Design, CEPT, Ahmedabd), M.Sc. (City design & Social Science, Londan School of Economics, UK)	Member	Architect, Ex-Associate Professor at VNSGU, Surat		

# One day workshop on "Energy Conservation Awareness"





Electrical Engineering has hosted GEDA sponsored an online one day workshop on "Energy Conservation Awareness" on 20th February, 2021. Dr. R J Motiyani has delivered welcome address and the workshop was conducted by Shri R. N. Pandya and Shri. Jigar Shah of Dynamic Consultant on behalf of GEDA. The workshop was coordinated by Prof. Ankur P. Desai, Prof. Rohit Damor, and Prof. Bhavin Trivedi under the guidance of Prof. (Dr.) R. J. Motiyani.

# 2 Days Workshop on "Tips and Techniques for Project Report/Thesis Writing"

A two-day workshop on "Tips and Techniques for Project Report/Thesis Writing" was organized by Mechanical Engineering Department. Prof. Hariketan B. Patel, coordinator and speaker of Workshop, greeted all the participants and the entire team of Mechanical Engineering Department.

The workshop was inaugurated by Dr. H. S. Patil, Professor & Head of Mechanical Department, and Dr. D. C. Patel, Associate. Professor, Mechanical Department.

In the opening remark of inauguration, Dr. H. S. Patil sir welcomed all the participants and acknowledged the role and importance of project report writing to enhance and effective present of technical skills.

Dr. H. S. Patil also highlighted the brief of the workshop and aim to arrange such kind of project writing workshop for final year students. He also briefly elaborated the various topics to cover during the 2 day workshop. He congratulated all the participants and organizing team to be part of such workshop.

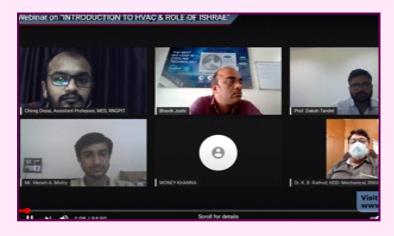






# One Day Workshop on "Introduction to HVAC and role of ISHRAE"

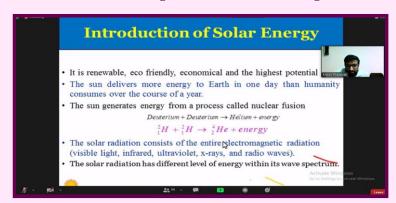
On 21st April, 2021, webinar on "Introduction to HVAC and role of ISHRAE" was organized by Mechanical Department. Mr. Money Khanna (BEE certified ECBC Master Trainer) was speaker for this webinar. More than 500 students participated in webinar. A webinar was arranged to enhance the knowledge of students in field of Refrigeration and Air Conditioning.

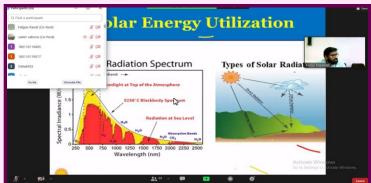




# **Industrial Visit at Sardar Patel Renewable Energy Research Institute (SPRERI)**

On 12th March, 2021, 45 students of 4th year, Mechanical Department, participated in inauguration of "13th Open house" organized by Sardar Patel Renewable Energy Research Institute (SPRERI) located at Vallabh Vidhyanagar, Anand and attended technical session conducted after inauguration. In video walkthrough session, all research work conducted at SPRERI was demonstrated and explained by researchers. Virtual Visit was coordinated by Prof. Daksh R Tandel, Prof. Bruhad S Naik and Prof. Dharmik A Patel and Prof. Krunal A Hathiwala. Visit was arranged to enhance the knowledge of students of Renewable Energy Engineering field.





# O<sub>2</sub> Audit of COVID-CIVIL Hospital, Navsari

Oxygen supply audit of COVID-19 CIVIL Hospital, Navsari was carried out on 3rd June, 2021 during 1.30 pm to 3.30 pm by Dr. Dilip Patel and Prof. Daksh Tandel from Mechanical Department.

Oxygen supply, distribution and consumption systems were observed and from collected data, Oxygen supply, consumption and loss values were calculated.

Mr. Dinesh Chavda, AHA Navsari Civil, and two bio medical staff coordinated during Oxygen Audit. Following are some images of audit.





## **O2** Audit of COVID-CIVIL Hospital, Surat

Oxygen supply audit of COVID-19 CIVIL Hospital, Surat was carried out on 1st June, 2021 by Dr. Dilip Patel from Mechanical Department.

Oxygen supply, distribution and consumption systems were observed and from collected data, Oxygen supply, consumption and loss values were calculated.

Dr Nimesh Verma-Professor Department of Surgery and Dr Sweta Patel-AP Anesthesia coordinated during Oxygen Audit. Following are some images of audit.





# FDP/Webinars/Conferences/STTPs/Workshop Attended/Participated

Faculty Name	Event Name	Organized By	Organized Date/s	
Automobile Department				
Prof. Sunil R. Khokhar	Electric Vehicles	College of Engineering, Cherthala, ATAL PLATFORM, ALL INDIA COUNCIL FOR TECHNICAL EDUCATION Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070.	18th -22th January, 2021	
Prof. Sunil R. Khokhar	DESIGN AND ANALYSIS OF ALL TERRAIN VEHICLES	ARASU ENGINEERING COLLEGE, TAMILNADU,	16th May, 2021	
	Civ	il Department		
Prof. Hemina Patel	Restoring the Earth	IQAC and Department of Environmental Science of SIES (Nerul) College of Arts, Science and Commerce	22nd April, 2021	
Prof Jaldip J Patel	Environment Health and Sustainability	Department of Civil Engineering at IGBC-VBIT SC	5th June, 2020	
Computer Department				
Prof. Bhumika H. Patel	BLOCKCHAIN	Department of Computer Science and Engineering, JSS Academy of Technical Education (JSSATE), Bengaluru, AICTE-ATAL FDP	18th - 22nd January, 2021	
Prof. Bhumika H. Patel	INTERNET OF THINGS (IoT): PRINCIPLES, PARADIGMS AND APPLICATIONS	Department of Electronics and Communication Engineering,Knowledge Institute of Technology, Salem, AICTE-ATAL FDP	1st - 5th February, 2021	
Prof. Kaushal T Kevadia	AI and ML Applications in Data Science	Department of Computer Science, IIICT Indus University- Ahmedabad	22nd – 26th February, 2021	
Prof. Kaushal T Kevadia, Prof. Mihir A. Mishra	Outcome Based Education and Accreditation	National Board of Accreditation, New Delhi and Education Department, Government of Gujarat for the Engineering Colleges and Universities in Gujarat.	6th March, 2021	
Prof. Kaushal T Kevadia	Atmanirphar Bharat: 5G-Opportunities and Readiness	AnanthKumar National Institute of Leadership Development and Public Policy Research	24th April, 2021	
Prof. Kaushal T Kevadia	Road map to Write Technical Research Paper	Computer Science & Engineering Department, RNGPIT, Bardoli in technical association with Computer Society of India (CSI)	3rd May, 2021	
Prof. Hetal M. Patel, Prof. Bhumika H. Patel, Prof. Kushal D. Patel	Sustainable Techniques For Rural Development	RCI-UBA SVNIT, Surat in association with NIRD&PR, Hyderabad	17th -21st May, 2021	

Faculty Name	Event Name	Organized By	Organized Date/s	
Prof. Mihir A. Mishra	Recent Trends and Opportunities for Research in Electronics and Computer Science Engineering	Department of Electronics and Telecommunication Engineering, Goa College of Engineering	24th - 28th May, 2021	
Prof. Bhumika H. Patel	Machine Learning and Computer Vision	Department of Electronics and Communication Engineering, Vignans Foundation for Science Technology and Research University	21st - 25th June, 2021	
	Electi	rical Department		
Prof. Dhaval Patel	Energy Swaraj Mission: Energy by locals for locals	Gujrat Technological University	19th January, 2021	
Prof. Bhavin Trivedi	Electric Vehicles	Manipal University Jaipur and AICTE Training And Learning (ATAL) Academy	1st-5th February, 2021	
Prof. Bhavin Trivedi	Electric Vehicle Evolution - Impact on Power grid	Department of Electrical and Electronics Engineering, Sri Venkateswara College of Engineering	8th-13th February , 2021	
Prof. Jay Desai	Machine Learning & Its Applications	R. C. Patel Institute of Technology, Shirpur	9th-15th February, 2021	
Prof. Bhavin Trivedi	Digital Signal Controllers for Control of Power Electronic Converters and Applications	EED, SCET, Surat	1st-6th MARCH, 2021	
Prof. Ankur P Desai	Content Archiving and Development Tools for research	IEEE India Council YP	26th April, 2021	
Prof. Ankur P Desai	Effective Publication	IEEE India Council YP	27th April, 2021	
Prof. Dhaval Patel, Prof. Ketan Lad, Prof. Bhavesh Patel	Sustainable Techniques for Rural Development	RCI-UBA SVNIT, Surat	17th-21st May, 2021	
Prof. Dhaval Patel	Spatial Planning for Gram Panchayat Development Planning	Regional Coordinating Institution - Unnat Bharat Abhiyan, Sardar Vallabhbhai National Institute of Technology, Surat	9th-11th June, 2021	
Prof. Jay Desai	Image Processing Using Open CV Python	Finland Labs (A Unit of Revert Technology Pvt. Ltd.)	14th-18th June, 2021	
Mr. Kamlesh Sonwane	Basic of Energy auditing and career opportunities for young Engineers		26th June, 2021	
Prof. Bhavin Trivedi, Prof. Khyati Naik Prof. Dharmishtha Patel	Industrial Training on SCADA	EE department, Sigma institute of Engineering, Vadodara		
Prof. Ankur P Desai	Enabling Innovation for Automotive HIL Testing and Control Design		17th March, 2021	
Mechanical Department				
Prof. Hariketan B. Patel	Basics of Tribology and Its Industrial Engineering Applications (BTIEA-2021)	Department of Mechanical Engineering, Sardar Vallabhbhai National Institute of Technology, Surat	4th-8th January, 2021	
Prof. Hariketan B. Patel	Design of experiments using Tagichi technique	Regional college for educastion research &technology, Jaipur	26th-31st January, 2021	
Prof. Hariketan B. Patel	Advanced Ceramics and Composites for Multifunctional Applications	Department of Materials Science and Engineering, IIT Kanpur	1st-6th March, 2021	
Prof. Hariketan B. Patel	Outcome Based Education and Accreditation	National Board of Accreditation, New Delhi and Education Department, Government of Gujarat for the Engineering Colleges and Universities in Gujarat	6th March, 2021	
Prof. Hariketan B. Patel	Fundamentals and advances in powder metallurgy	Metallurgy department IIT, Indore	15th-20th March, 2021	
Prof. Daksh R Tandel, Prof. Hitesh C. Rana	Sustainable Techniques for Rural Development	Regional Coordinating Institute-Unnat Bharat Abhiyan Sardar Vallabhbhai National Institute of Technology, Surat in association with National Institute of Rural development and Panchayati Raj, Hyderabad	17th-21st May, 2021	

Faculty Name	Event Name	Organized By	Organized Date/s
Prof. Dhaval S. Chaudhari	Environment and sustainable development	SPCE: NSS cell & state cell of gujarat	5th June, 2021
Prof. Dhaval S. Chaudhari	Innovations in Mechanical Engineering and Technology	Dr. B.C.Roy polytechnic	18th-20th June, 2021

## **Faculty Achievement**

## Invited as an Expert/Jury Member/Technical Committee Member

#### **ASH Department**

- •Dr. S.S.Patel invited as an expert in the board of studies for mathematics in Indus University, Ahmedabad for designing the syllabus of B.Sc., M.Sc., B.Tech., courses and Ph.D course work.
- •Dr. S.S.Patel appointed in Research Advisory Committee in Mathematics by VNSGU, Surat, for three years.

#### **Computer Department**

- •Prof. Archana Nayak worked as a member of the Technical Program Committee in the International Conference on Computing Science, Communication and Security (COMS2-2021) organized by the Ganpat University, Gujarat, INDIA in association with the Springer CCIS Publishing on 6th 7th February 2021.
- Prof. Archana Nayak work as a member of subject expert for the BCA program of Vanita Vishram Women's University

## **Mechanical Department**

•Dr. H. S. Patil has participated in the University Distinguished Lecture titled "Higher Education in India in the Post COVID-19" delivered by Prof. Anil D. Sahasrabudhe, Chairman of AICTE, organized by SRM University-AP, on 5th JUNE 2021.

#### **Grant Received**

- •Dr D.C. Patel and Dr. H. S. Patil: Received a Research Grant of Rs. 5,04,900/- for the Research Work on "Design and Development of Low Cost Coriolis Meter" Under the Scheme for Supporting R & D in Emerging Fields of S & T on State Priority Areas under STI Fund from Gujarat Council on Science and Technology (GUJCOST), Department of Science Technology, Gandhinagar (March-2021).
- •Dr. H. S. Patil and Dr D.C. Patel: Received a grant of Rs. 93000/- to conduct Online Faculty Development Programme on "Metallurgical Testing and Failure Analysis of Metals" from AICTE Training And Learning Academy (May-2021).

## **Webinar Conducted**

•Dr. D. C. Patel conducted webinar for final year students on "Expectations of industries from Engineers and how to prove yourself in interview" on 1 April 2021.

## Ph. D. Enrollment

- Prof. Dhruvang Gayakvad Enrolled as a Ph. D. scholar at SVNIT, Surat in January-2021
- •Prof. Ketan Lad & Prof. Jay Desai Enrolled as a Ph. D. scholar at Gujarat Technological University, Ahmedabad in January-2021
- Prof. Daksh Tandel Enrolled as a Ph. D. scholar at Gujarat Technological University, Ahmedabad in January-2021
- Prof. Kenal Tandel Enrolled as a Ph. D. scholar at BVM, VV Nagar in January-2021
- Prof. Kaushik Patel Enrolled as a Ph. D. scholar at BVM, VV Nagar in January-2021
- Prof. Brijesh Patel Enrolled as a Ph. D. scholar at BVM, VV Nagar in January-2021

## **E-LEARNING COURSES/MODULES COMPLETED**

#### Faculty Name - Prof. Mayur J. Jalanapurkar Exam Conducted on Sr. No. **Duration of Course** Marks Obtained from 100 **Course Name** Organized by AICTE - NITTT - Module-1- Orientation towards 8 weeks 27th February, 2021 90 Technical Education & Curriculum Aspects. (March-April 2020) NATIONAL AICTE - NITTT - Module-2- Professional Ethics 8 weeks INITIATIVE 27th February, 2021 79 Sustainability. (March-April 2020) FOR TECHNICAL. **TEACHERS** AICTE - NITTT - Module-5- Technology Enabled 8 weeks 6th March, 2021 82 **TRAINING** Learning and Life-long Self-learning (March-April 2020) (NITTT-2021) AICTE - NITTT - Module-6- Student Assessment 90 8 weeks 6th March, 2021 (March-April 2020) and Evaluation

## **Consultancy Work**

## **Civil Engineering Department**

Civil Engineering department conducted various consultancy activities like conditional assessment, proof checking and design of different structure in GIDC Vapi and Daman areas

#### **Computer Engineering Department**

GIDC Degree Engineering College (GDEC) is in agreement with various reputed company like NSEIT Ltd., Tata Consultancy Services Ltd. etc. Under this agreement Computer Engineering Department has successfully hosted multiple online examinations at GDEC premise.

The details of online exam/s hosted by Computer Engineering Dept, GDEC during past 2 quarters, i.e from Jan-2021 to Jun-2021 are as mentioned below.

Sr. No.	Name of Examination	Host Company	Date/s	Total Candidate	Revenue Earned (INR)
1	DGVCL	NSEIT	5,6-Jan-2021	720	51920
2	PGVCL	NSEIT	17 to 21-Feb-2021	1725	119476
3	JEE – NTA	TCS	23,24,25,26-Feb-2021	455	88913
4	JEE – NTA	TCS	16,17,18-Mar-2021	391	74115
5	GSECL	NSEIT	26-Mar-2021	345	23895
6	UGVCL	NSCIT	27-Mar-2021	330	23246
7	JEE – NTA	TCS	31-Mar-2021	65	18773
				Total	400338

# Paper Publication/Presentation

#### **ASH Department**

•Prof. Harshal G.Vashi had published a paper titled "Employability Skills of Engineering Gradutes- a Continuously Evolving "Set" For Sustainable Synergy between Industry and Institute Objectives" in Flusserstudies UGC care listed journal ISSN 1661-5719.

#### **Automobile Department**

•Prof. Mayur J. Jalanapurkar presented paper entitled "An effect of surface texturing and composite coating on tribological characteristics of I.C engine components: A Review" in 4th International E-Conference On Recent Advancement In Mechanical Engineering And Technology (ICRAMET 2021) dated 24th -25th June 2021 organized by Aarupadai Veedu Institute of Technology, Paiyanoor-603 104.

## **Computer Department**

- •Prof. Archana Nayak has Participated in the Second International Conference on Computing Science, Communication and Security(COMS2-2021) organized by the Ganpat University, Gujarat, INDIA in association with the Springer CCIS Publishing on 6th 7th February 2021.
- •Prof. Kushal D. Patel presented paper on "Literature Review on Software Reliable Metrics" in Online International Conference on Recent Advances in Deep Learning during 29-31, January 2021.

## **Electrical Department**

- •Dr. R J Motiyani has published a research paper entitled "Employability Skills of Engineering Graduates A Continuously Evolving "Set" for Sustainable Synergy between Industry and Institute Objectives" in "FlusserStudies", a UGC Care listed International Journal, Special Issue: Sustainability and Management, ISSN: 1661-5719, Vol. 30, Issue 1, pp. 126-137
- •Prof. Ankurkumar P Desai has presented research paper entitled "A Six-Phase Two Level VSI- Fed Six-Phase Asymmetrical Induction Motor using 48-Sector Vector Space Decomposition Based SVPWM" at 2nd International Conference on Emerging Technology (INCET 2021) scheduled during 21st to 23rd May 2021. The paper is published in IEEE Xplore, a Scopus indexed proceeding.

## **Mechanical Department**

- •Dr. H. S. Patil and Dr D.C. Patel: Presented a technical paper on "Effect of Coriolis Flow Meter Tube Shape and Size on Oscillation Modes" in a Seminar organized by Fluid Power Society of India dated 18th June, 2021
- •Dr. Hiralal S. Patil, presenting the paper on "An effect of surface texturing and composite coating on tribological characteristics of I.C engine components: A Review" in 4th International e-Conference on Recent Advancement in Mechanical Engineering & Technology (ICRAMET 2021) held on 24th & 25th June, 2021, organized by the Department of Mechanical Engineering, AVIT.
- Prof. Hariketan B. Patel presented a research paper in "Resent Advancement in Manufacturing RAM-2021" at SVNIT SURAT during 10th -12th, June 2021.
- •Prof. Hitesh C. Rana submitted a manuscript for Crack propagation analysis in glass-epoxy composite material using experimental and XFEM approach in Journal of Composite Materials by SAGE Publication.

# **Placement Update**

# Mechanical Engineering







































# **Electrical Engineering**





Desai Dhairya











Shivshankar Shukla









**Computer Engineering** 











# Civil Engineering



















