GTU - School of Engineering and Technology

KANASH

Reflection of GTU -SET Activities

Section 1: Key Achievements at the School of Engineering and Technology

GTU Code Unnati Innovation Marathon 2023-2024

The Final Showcase and Awards Event "**Innovation Marathon 2023-2024**" under the GTU – Code Unnati CoE in Emerging Technology was organized on **20th February 2024**, with the Edunet Foundation and SAP, India. Through the marathon, the Code Unnati Program aims to provide a platform for aspiring engineers to showcase their technical skills in addressing real-life challenges and making the world a better place. The participants must build innovative solutions to real-world problems

using emerging technologies like Artificial Intelligence, Machine Learning, Data Analytics, Blockchain, Cloud Computing, Robotics, etc in the event, the students of various disciplines of engineering colleges from Delhi, Maharashtra and Gujarat actively participated and solved various problem statements successfully to promote the spirit of Industry Revolution 4.0 and Entrepreneurship. **Prof. Gautam D. Makwana,**

Prof. Komal R. Borisagar, Prof. Komal and Prof. Soniya Jain served as the expert evaluators and industry experts. Prof. Margam Suthar coordinates the program with the Code Unnati Program team.

DAMLAI

GTU jointly organized a Collaborative Research Symposium on **Data Analytics, Machine Learning, and Artificial Intelligence** (DAMLAI) 2024, 21-23 March 2024, with the Indian Statistical Institute (ISI) Kolkata. The symposium aimed to facilitate knowledge sharing, provide a platform for discussing technological advancements, and foster dialogue among researchers and professionals in Data Analytics, Machine Learning, and Artificial

Intelligence. This symposium is organized for the Ph.D. Scholars, Ph.D. Supervisors and faculty members of the GTU. The Symposium was inaugurated by **Dr. Sanghamitra Bandyopadhyay** (ISI, Kolkata) and **Dr. Manoj K. Tiwari** (IIM, Mumbai) in the presence of **Hon'ble Vice Chancellor Dr. Rajul K. Gajjar**, and **Registrar Dr. K. N. Kher.** During the symposium, various renowned experts, namely, **Prof. Ashis Kumar Chakraborty**, Former Head of SQC & OR Division, ISI, Kolkata, **Dr. Utpal Garain**, Professor, **Dr. Debapriyo Majumdar**, Assistant Professor from the Computer Vision and Pattern Recognition Unit, Computer and Communication Science Division, ISI, Kolkata, and **Prof. Arnab Kumar Laha**, Associate Professor, Operations and Decision Science, IIM Ahmedabad, **Prof. Ujjwal Maulik**, Head, CED, Jadavpur University, **Dr. Abhiji Barman**, IIM, Raipur, **Dr. V. Jayanthy**, Group Director, VSSC, ISRO, Bengaluru, **Sh. Niloy Majmudar**, Zydus Group, delivered their expert talk on various topics related to data analytics, machine learning, and artificial intelligence. Many Ph.D. scholars of the GTU submitted their extended abstracts, showcasing their research in AI, ML,

and Data Analytics. The shortlisted extended abstracts are presented and published in the **Symposium's Book with ISBN: 978-93-89934-99-1.** Two papers are awarded the "Best Paper Award": (1) A coverless image steganography based on Huffman Encoding and robust image wavelet hashing, (2) The Impact of Energy Hole problem in Underwater Wireless Sensor Networks and Machine Learning-Driven Mitigation Strategies. GTU-SET and the R & D Cell, GTU organized the event. The event was coordinated by **Prof. Gautam D. Makwana, Prof. P. S. Mann, and Prof. Parth Ravel** (LDCE, Ahmedabad).

ACPC Awareness Program

GTU-SET organized an ACPC Awareness Seminar on 06.04.2024 for the pass out and aspiring

students of 12th science stream to become aware of the online admission process of the admission in UG engineering programs. **Prof. H.A. Shukla and Prof. C. A. Patel** delivered the session on the ACPC Admission Process. More than 36 students with their parents actively participated in the session. **Prof. Gautam D. Makwana, and Prof. Rasik Makwana** coordinated the program.

CCE Certified Course – Value Added Civil (Structural) Engineering Course

Recently conducted a certification course titled **"Unboxing OAPI Feature of the Civil (Structural) Engineering Software using Python Programming."** organized by the Centre for Continuing Education (CCE) at GTU, the course was coordinated by **Prof. (Dr.) Kaushik Gondaliya**, with support from **Prof. Komal Prajapati** and **Prof. (Dr.) Bhavdip Moghariya.** The course was delivered online from June 24 to July 5, 2024, encompassing 55 hours of intensive training. The course aimed to equip civil

engineering students and professionals with essential Python programming skills tailored to civil and structural engineering applications. It covered Python basics, data handling with Pandas and NumPy, data visualization with Matplotlib and Seaborn, Monte-Carlo simulations, and the integration of Python with industry-standard software like SAP2000, in automating engineering tasks, data analysis,AutoCAD, and ETABs. The significance of Python and enhancing research capabilities was emphasized throughout. Participants included undergraduate and postgraduate students, Ph.D. scholars, and industry professionals. The course structure was divided into two weeks, with the first week focusing on foundational Python programming and the second on its applications in civil engineering. Detailed attendance and evaluation records showed high engagement, with most participants meeting the certification criteria. Top performers included Gopani Archan Mukeshbhai and Dave Kavya Nishchal. Feedback from participants was overwhelmingly positive, highlighting the content quality, clarity of presentations, and engagement levels. They particularly appreciated the practical approach and hands-on sessions. Expert talks by **José Fabrizio Inga Díaz, Walid A. Kana H., and Harsh Parnale** provided valuable insights into advanced Python applications in structural engineering. The course concluded successfully, bridging the gap between traditional civil

engineering practices and modern technological advancements. The course set a benchmark for future programs, ensuring a valuable and enriching learning experience for all participants.

Section 2: Research Contributions

Research Papers in Peer-Reviewed (SCI/Scopus/WoS, etc) or UGC Listed Journals

Panchal, S. D., & Panchal, R. B. (2024). Enhanced approach to generate one-time password (OTP) using quantum true random number generator (QTRNG). *International Journal of Computing and Digital Systems*.

Bhalala, R., Mann, P. S., Goswami, N., Patel, N., Damor, S., & Tank, N. (2024). Prior stage kidney disease prediction with AI and supervised machine learning techniques. *Indian Journal of Natural Sciences.*

Sathwara, B. Y., & Mann, P. S. (2024). A hybrid approach based on boosting algorithm for effective Android malware detection. *International Journal of Computing and Digital Systems*.

Suthar, M. (2024). Development of modified random waypoint mobility model of routing protocol for the mobile ad-hoc network. *Power System Technology*.

Mann, P. S., Panchal, S. D., Singh, S., & Kaur, S. A. (2024). A compact artificial bee colony metaheuristic for global optimization problems. *Expert Systems*.

Bhatt, R. V., & Makwana, G. D. (2024). Dual-band microstrip patch antenna for 5G and WLAN/WiMAX wireless applications. *Indian Journal of Science and Technology*.

Jain, R., Gondaliya, K. M., Palsanawala, T. N., Vasanwala, S. A., & Bhaiya, V. (2024). Seismic fragility assessment of base-isolated RC frame building using direct displacement-based design and force-based design. *Practice Periodical on Structural Design and Construction*

Gondaliya, K. M., Amin, J., Bhaiya, V., Vasanwala, S., & Desai, A. (2024). Seismic vulnerability assessment of building stocks in the Western Zone (Surat-city, Gujarat) using capacity spectrum-based method. Practice Periodical on Structural Design and Construction.

Singh, P. (2024). A survey on smart healthcare methods for tumor identification. *Communication and Management Journal, 9*(6), 2269-7195.

Conference Papers in National/International level (Accepted and Presented Only)

Bhalala, R. B. & Mann, P. S. (2024, December). Prior Stage Kidney Disease Prediction with AI and Supervised Machine Learning Technique. Paper presented at the 3rd International Conference on Women in Science and Technology: Creating Sustainable Career, BVM Anand, Gujarat.

Bhalala, R. B. & Mann, P. S. (2024, March). Advanced Prediction Models for Early Detection of Stage Kidney Disease Using AI and Supervised Machine Learning Approaches. Paper presented at the 4th International Conference on Artificial Intelligence, 5G Communications, and Network Technologies (ICA5NT 2024), Velammal Institute of Technology, Chennai.

Makwana, G. D. (2024, March). Wireless Networked Control Systems: Real-world and Simulated Optimization with Performance Analysis Paper presented at the Research Symposium on "Data Analytics, Machine Learning, and Artificial Intelligence" " jointly organized by Gujarat Technological University and Indian Statistical Institute, Kolkata.

Makwana, G. D. (2024, March). A Study of the State of Human Minds during Meditation Using Heart Signals and Machine Learning Techniques. Paper presented at the Research Symposium on Data Analytics, Machine Learning, and Artificial Intelligence, jointly organized by Gujarat Technological University and Indian Statistical Institute, Kolkata.

Upadhyay, D. (2024, May). Machine Learning-Based and Deep Learning-Based Intrusion Detection System: A Systematic Review. Paper presented at the International Conference on Innovations and Advances in Cognitive Systems, Builders Engineering College, Kangayam, India.

Madhwani R., Gondaliya, K., (2024, February). Seismic Performance-based Evaluation of R-factor for Indian Code Compliant RC Frames with URM Infill. Paper presented at the 3rd International Conference on Advances in Concrete, Structural & Geotechnical Engineering (ACSGE – 2024), BITS Pilani – Pilani campus.

Amin, J. A. (2024, April), Investigating the Traditional Ingredients of the Indo-Saracenic Architecture in Baroda City, Gujarat. Paper presented at the International Conference on Legacy of Traditional Architecture, Aligarh Muslim University, India.

Mehta C., Gondaliya, K., Amin, J. A., (2024, June). Investigation of Wind Interference on Vertically Twisted Skyscrapers. Paper presented at the International Conference on Structural Engineering and Construction Management (SECON'24), Federal Institute of Science and Technology, Kerala, India.

Hakani, R. A. (2024, April). Yolov8 Series Algorithm for Real-Time UAV Detection. Paper presented at the International Conference on Nanoelectronics Machine Learning Internet of Things & Computing Systems (NMIC-2024), Indian Society for VLSI Education (ISVE).

Hakani, D. & Hakani, R. A. (2024, May). Real-time Traffic Control System for Emergency Vehicle Using Deep Learning Method. Paper presented at the International Conference on Advanced Technologies and Intelligent Automation (ICATIA-24), Protean Tech Services.

Book Chapters in Edited Books with Reputed Publishers

Raval, A., Maheriya, A., Panchal, S. D. & Borisagar, K. R. (2024). Empowering the Future of Smart Grids: Unveiling the Role of Electric Vehicles in V2G Integration for Sustainable Infrastructure. In E-Mobility in Electrical Energy Systems for Sustainability (IGI Global Publishers).

Sharma, S. & Mann, P. S. (2024). Blockchain Technology Framework: Issues and Future Challenges. In Computational Intelligence and Blockchain in Biomedical and Health Informatics (Routledge- Taylor & Francis Group).
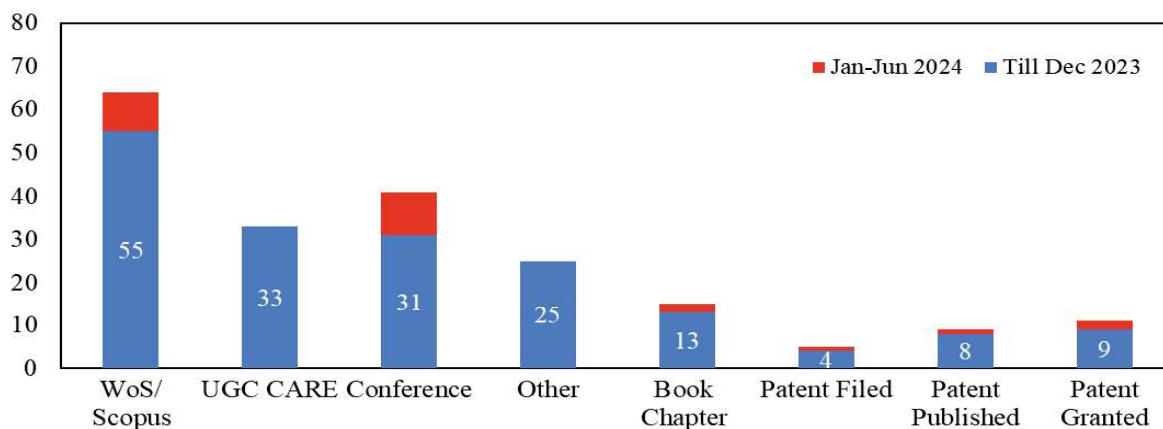
Consultancy Work

Dr. J. A. Amin - Proof checking and vetting of structural design for **G+1 story RC frame RPF office building and RPF Barrack building at Dhrangadhra Railway Station, Western Railway.** (**Consultancy value: Rs. 30,000**)

Patents

Name of Faculty	Title	Status
Prof. Raj Hakani	Turret-based design for controlled ball launching mechanism	Granted
	Turret-Based Ball Launching Device	Granted
	Smart Gloves for Real-Time Force Measurement	Filed
	Simplified Semi-Autonomous Robotic System For Object Picking And Stacking Mechanism	Published

Cumulative Publication Details:

	WoS/ Scopus	UGC CARE	Conference	Othe	Book Chapter	Patent Filed	Patent Published	Patent Granted
Till Dec 2023	55	33	31	25	13	4	8	9
Jan-Jun 2024	09	00	10	00	02	1	1	2
Total	64	33	41	25	15	5	9	11

Section 3: Faculty/ Student Achievements and Contributions

Research Funding Projects

Faculty Name	Project Name	Funding Type	Funding Agency	Amount (Rs.)
Prof. (Dr.) P. S. Mann Asso. Prof., GTU-SET	SMS	Internal	GTU	90,000/-
Prof. Raj Hakani Asst. Prof., GTU-SET	SkillMaster Pro	External	SSIP Cell – Saurashtra University	2,00,000/-
	PCB Etcher	External		1,40,000/-
	Warehouse AutoBot	External		70,000/-
	ShooterBot	External		2,25,000/-
	Wire Passer Mechanism	Internal	SSIP Cell – GTU	1,25,000/-
	Automated Tissue Paper Dispenser	Internal		2,20,000/-
	Drone Technology	External	I-Crate and I-Hub	9,60,000/-

MOOCs Completed by Faculties/students

Name	Course Name
Prof. Soniya Jain, Assistant Professor	Python for Data Science (4 weeks) Introduction to Programming in C (8 weeks) Deep Learning (12 weeks)
Prof. Komal Prajapati, Assistant Professor	Blockchain and its Applications (12 weeks) Privacy and Security in Online Social Media (12 weeks)

Awards and Recognitions

Name	Details
Prof. Soniya Jain	• Appreciation for volunteering as Rapporteur in Vibrant Gujarat Global Summit - 2024 • Recognition as Mentor for NPTEL Online Certification Course for Introduction to C Programming
Prof. Gautam D. Makwana	• Recognition Award for IP Excellence - 2024 under Category Patent (Design) by the GTU in association with IPFC and SPRIHA-DPIIT (MCI, GoI).
	• Appreciation for serving as Rapporteur in Vibrant Gujarat Global Summit-2024 by Sardar Patel Institute of Public Administration (SPIPA), Ahmedabad • Served as Evaluator for the Inventors Challenges - The National Annual Contest jointly organized by AICTE, ARM Education, and STMicroelectronics • Member, Expert Technical Evaluation Committee, Department of Telecommunication, Ministries of Telecommunication, GoI, New Delhi, for 6G Proposals • Served as Chairman, 6th Technical Expert Committee for Evaluation of Startups under the Scheme titled "Digital Communication Innovation Square (DCIS) under Champion Service Sector Scheme (CSSS) 2022-23, Department of Telecommunication, Ministries of Telecommunication, GoI, New Delhi • served as an expert evaluator in the SAP Code Unnati Innovation Marathon 2023-24 jointly organized by Edunet Foundation, SAP and GTU
Prof. Komal Prajapati	• GTU Expert Evaluator in "Innovation Marathon 2023-2024 Final Showcase and Awards Event"
Dr. Margam Suthar	• Appreciation Certificate from the Edunet Foundation • Certificate of Excellence for organizing the Code Unniti Innovation Marathon 2023–24
Dr. P S Mann	• Successfully cleared the International Accreditors Training Program by the Asia Pacific Accreditation and Certification Commission (APACC)
Prof. Deepak Upadhyay	• Appreciation for technical contribution to CBI, Mumbai, for case and training session FDP
Prof. Mridul Seth	• Appreciation for volunteering as Rapporteur in Vibrant Gujarat Global Summit -2024
Dr. Kaushik Gondaliya	• Recognition for an expert session on "Machine Learning-based Approach for Seismic Vulnerability of RC Frame Building." at CSIR-CMFR NAGPUR RESEARCH CENTER, Maharashtra. • Recognition for an expert lecture on "R-Factor evaluation of the RC frame building designed as per Indian standards." at G H RAISONI INSTITUTE OF ENGINEERING & TECHNOLOGY, Nagpur
Prof. Raj Hakani	• The GEM Mentor Award by the Atal Innovation Mission honors faculty members who volunteer their time and expertise to train school students in innovation and entrepreneurship. This prestigious recognition highlights their dedication and impact on young learners. Across India, only 39 mentors have been selected for this esteemed award, showcasing their exceptional contributions to nurturing the next generation of creative thinkers and problem-solvers.

Faculty Contributions as Resource Person

Name	Details
Prof. S. D. Panchal	• International Seminar on Opportunities Emerging Around Artificial Intelligence, KPG University Vadodara • NITTTR Two Week DTE Approved FDP on Data Analytics and Applications, LDCE Ahmedabad
Prof. Gautam D. Makwana	• Session on "Various Research Funding Opportunities and Writing Proposal," GP Polytechnic, Gandhinagar
Prof. Deepak Upadhyay	• Expert session on "Introduction to OSINT" for Nepal Police Officers at Rashtriya Raksha University, Gandhinagar. • "Empowering Women: Safeguarding Cyber security" under RUSA for GEC Gandhinagar • Cyber Security Awareness Webinar for Bank Customers, Gandhinagar Zone • Navigating the Digital Dark: Cybercrime trends and security measures
Prof. Raj Hakani	• Workshop on "Hands-on Experience Learning Skill - Robotics" • Three Days Hands-on Workshops, "Century Skills for Machine Learning." • One Week Training Programme on "Robotics & Automation" • FDP on "Robotics and Automation" •Workshop on "21st Century Machine Learning Skill"
Dr. P. S. Mann	• PDP Programme at NITTTR, Chennai • Plenary Talk at Ahmedabad AI Summit 2024 • Professional Development Programme on Artificial Intelligence, NITTTR, Chennai

Translation Work

Prof. Raj Hakani (PG-IoT) -National-level translation of "Physics" subject to Gujarati -National-level translation of "Consumer Electronics" for Diploma course.

Prof. Rasik Makwana (13th to 17th May, 2024) Contributed As Subject / Language Expert in the Meeting organized by Commission for Scientific and Technical Terminology (CSTT) functioning under the Ministry of Education, Department of Higher Education, Government of India to prepare the Gujarati Edition of the Tri-lingual (English-Hindi-Gujarati) Comprehensive Glossary, Engineering.

Expert Sessions and Workshops

Prof. Komal Prajapati scheduled an insightful session on the **"Evolution of Generative AI"** on **10th February 2024** delivered by **Mr. Aditya Shah (Senior Software Engineer, Google).** This session delved into the historical development, current advancements, and future potential of generative artificial intelligence, providing participants with a comprehensive understanding of the topic.

Prof. Mridul Seth coordinated sessions as below:
"Demonstration of Non-Destructive Tools & Structural Health Monitoring" (on 19th February, 2024): This session showcased advanced non-destructive testing tools used for assessing the integrity and safety of structures without causing any damage. Participants learned about various techniques and their practical applications in monitoring the health of structures.
"Recent Trends in Structural Health Monitoring & Masonry Structures" (on 20th March, 2024): This session covered the latest advancements in structural health monitoring, mainly focusing on masonry structures. It provided insights into modern monitoring techniques and their significance in maintaining structural integrity.
"Application of soft computing in Civil Engineering" (on 3 Feb, 2024): by Dr. Brijesh Kumar Yadav explored the integration of stochastic methods alongside the traditional deterministic approach in the Civil

Engineering domain coordinated by the Department of Civil (Structural) Engineering, SET, GTU.

Prof. (Dr.) Kaushik Gondaliya coordinated an expert session titled **"Bridges: From Classroom Concepts to Consulting Realities"** on 2nd May 2024. The session was conducted by **Mr. Kamal Soni (Owner of The Setu Nirman)** an industry expert who bridged the gap between theoretical knowledge and real-world consulting practices in bridge engineering.

Prof. Soniya Jain coordinated sessions as below:

"Strategic Mastery: Elevating Your Aptitude for GATE and Beyond in Placement Activities" (on 8th February, 2024): This session focused on strategies and techniques to excel in the GATE examination and improve placement prospects. It covered effective study plans, problem-solving techniques, and tips for conducting interviews.

"Exploring Post Graduate Opportunities (Technical & Non-Technical)" (on 29th February, 2024): This session provided an overview of various postgraduate Opportunities available to students in technical and non-technical fields. It included information on admission processes, scholarship options, and career prospects.

"Unlocking the Power of Natural Language Processing: A Journey into the Engineering Domain" (on 14th March, 2024): This expert session explored the applications of natural language processing (NLP) in engineering. It covered fundamental concepts, current research trends, and real-world applications of NLP in solving engineering problems.

Faculty Participation in National/International Events

Prof. (Dr.) S. D. Panchal has recently participated in several notable events. He attended a three-day workshop on student well-being at IIT Gandhinagar, focusing on strategies and practices to enhance students' mental and emotional health. Additionally, He was present at the IDA University Leader's Meet & Policy Exchange Roundtable in New Delhi, where university leaders discussed and exchanged policies to improve educational standards and administration.

Prof. Deepak Upadhyay participated in the C-Level Executives International Conference on Cyber Defense & Blockchain. This event brought together top executives to discuss the latest advancements and challenges in cyber defense and blockchain technology, offering a platform for high-level networking and knowledge sharing.

Prof. Raj Hakani attended several workshops to further his expertise in various technical fields. He participated in sessions on Artificial Intelligence for Electronics, gaining insights

into the integration of AI in electronic systems. Additionally, he attended workshops on Embedded C, NavIC (Navigation with Indian Constellation): Development, Scope, and Applications, and 21st Century Education Understanding & Implementation of the National Education Policy (NEP). These workshops gave him a deeper understanding of cutting-edge technologies and educational reforms.

Certifications and Professional Development:

Prof. Komal Prajapati & **Dr. Kaushik Gondaliya** completed Infosys Springboard courses on **"Natural Language Processing for Developers"** and **"Basics of Python."**

Prof. Soniya Jain & **Prof. Komal Prajapati** participated in the **NEP 2020 Orientation & Sensitization Programme** under the Malaviya Mission Teacher Training Programme (MM-TTP).

Expert Contributions:

AICTE empaneled **Prof. (Dr.) Jignesh Amin, Prof. (Dr.) S. K. Hadia, Prof. (Dr.) G. D. Makwana, Prof. (Dr.) P. S. Mann** as a Distinguished Expert for scrutiny and expert visits of institutes applying for AICTE Approval.

Prof. Mridul Seth was invited as an Environmental Expert for the screening committee of the Scheme of Assistance for Common Environment Infrastructure under Industrial Policy 2015 and 2020.

Internship Update

1) GTU's IDEA Lab organized a twelve-week internship program from January 19th to April 20th, 2024, for 11 students from GTU-affiliated colleges. The program aimed to provide practical experience and foster innovation through various projects. An evaluation event on April 24th, attended by Prof. Kinnar Vaghela and Prof. Jashvant Dave, showcased 11 innovative projects, including IoT-based smart agricultural systems, Drone Identification and Tracking Systems, Face Recognition-Based Attendance, and Human Pose Estimation. The evaluators praised the interns for their dedication and the program's role in nurturing creativity and real-world problem-solving skills, reaffirming GTU-IDEA Lab's commitment to advancing technological education and fostering innovation.

2) Cyber Security Department has completed the 12-week internship in the domain of cyber security. A total of 15 students registered under the internship program and knew cyber security with hands-on practices. The topics covered IOT security, OSINT, Network Security, Digital Forensics, VPN, VPS, VAPT, etc.

3) The Civil (Structural) Department at the School of Engineering and Technology recently concluded a 12-week internship program on vulnerability assessment. The program provided participants with extensive knowledge and hands-on experience in seismic vulnerability evaluation. Notably, a participant from Bangladesh excelled by studying ETABS software for nonlinear analysis of RC frame structures. The curriculum included an introduction to ETABS, detailed sessions on Ahmedabad's seismic risks, and practical training in analyzing RC frames under seismic loads. This internship enhanced participants' technical skills and prepared them for structural engineering challenges in seismically active regions. Congratulations to all participants on their achievements and future contributions to structural engineering.

4) GTU's School of Engineering and Technology, in collaboration with Edunet Foundation, organized a 12-week internship program on "AI, IoT, and ERP 2023-2024" at the Code Unnati Centre of Excellence. Aligned with the Government of India's Skill India and Digital India missions, this program offers engineering students from Semester 8 practical training in emerging technologies such as Artificial Intelligence, Machine Learning, IoT, SAP ERP, and Automation. The second batch, held at the Bosch Center of Excellence in Automation from February 11 to May 10, 2024, included 85 students from various colleges. The program, inaugurated on February 11, 2024, also featured an "Industrial Automation" internship, with over 100 final-year students participating across the state.

Dhwani Rajkumar Hakani (PhD Scholar) participated in 21st Century Education Understanding & Implementation of NEP & NEP 2020 Orientation & Sensitization Programme.

Tirthan Kiyada (PG-CE Cybersecurity) earned certifications in Introduction to Cybersecurity from CISCO, Foundations of Cybersecurity, Play It Safe: Manage Security Risks from Google, Postman API Fundamentals Student Expert & 30 Days of Postman - for developers. He also qualified in GATE 2024 Examination & Certified AppSec Practitioner (CAP).

Bhatt Kandarp Vimal (UG-Computer Eng) earned certifications in Kubernetes, Jenkins, and Git Version Control.

MOOCs Completed by Faculties/students

Name	Course Name
Ph.D. Scholar: Dhanashree Vipul Yevle	Machine Learning for Engineering and Science Applications (12 weeks) Deep Learning (12 weeks)
PG Student: Urmil Mevada and Karnav Modi	Blockchain and its Applications (12 weeks)
UG Students: Patel Dhvanit Shaileshkumar, Kandarp Vimal Bhatt, Nandani R. Jaiswal, Harshil Kela, Vishwa Brahmbhatt, Bansari Darji, Yatri Patel	Introduction to Programming in C (8 weeks)

Cultural Club

Vasant Panchmi Pooja

On the 14th February 2024, the School of Engineering and Technology organized the Vasant Panchmi Pooja, which celebrates spring, fostering cultural unity and academic fervor through prayers of Goddess Saraswati and festivities symbolizing new beginnings and the pursuit of knowledge. Our Director, Prof. (Dr.) S. D. Panchal, initiated the pooja along with the harmonious echoes of Saraswati Aarti in the presence of all our faculty members and staff. The students of UG Computer Engineering glorified the occasion by making a Beautiful rangoli. All the students of UG and PG, dressed in yellow, brought in a sense of unity and brotherhood and welcomed the 'Vasant' or the 'Spring Season' with a spirit of dedication towards their goals.

SAPTAK Club Activities
Social Service Club activities
Armed Forces Flag Day Celebration

The Social Service Club, coordinated by **Prof. Bhavadip Moghariya and Prof. Rasik Makwana**, organized the Armed Forces Flag Day event on 21st February 2024 at the School of Engineering and Technology (SET). This initiative aimed to foster social responsibility among students. On Armed Forces Flag Day, celebrated annually on 7th December, NSS Unit-SET volunteers collected Rs. 5,412 from students, faculty, and staff, which was transferred to the Armed Forces Flag Day Fund in Ahmedabad. The funds support the families of martyred soldiers, ex-servicemen, and current soldiers. The event raised awareness and sensitized students to the importance of contributing to the welfare of armed forces personnel.

World Water Day Celebration

The SE - Environment Club, led by Prof. Mridul Seth, celebrated World Water Day on 20th March 2024 with a poster-making and presentation competition themed "Water, Life, and Creature." The event aimed to raise awareness about freshwater importance, water-related challenges, and sustainable practices. Dr. S. D. Panchal, Director of GTU-SET, inaugurated the competition, emphasizing water-related Sustainable Development Goals (SDGs). Thirty students in eight groups participated. The event, coordinated by student Deep Suthar and hosted by Saurav Bhatta and Devanshi Singh, concluded with results announced by juries Dr. K. B. Borisagar and Prof. Komal Prajapati, and concluding remarks from Prof. M. S. Seth. These activities highlight the club's dedication to social welfare and environmental sustainability.

SE - Environment Club

The SE - Environment Club, led by Prof. Mridul Seth, celebrated World Water Day on 20th March 2024 with a Poster Making and Presentation competition at SET's Seminar Hall. The event aimed to raise awareness about freshwater importance and sustainable practices, featuring an inaugural address by Dr. S. D. Panchal on water-related Sustainable Development Goals (SDGs). Thirty students in eight groups participated, with coordination by Deep Suthar and hosting by Saurav Bhatta and Devanshi Singh. The results were announced by juries Dr. K. B. Borisagar and Prof. Komal Prajapati, followed by concluding remarks from Prof. M. S. Seth. These activities highlight the club's dedication to environmental education and sustainability.

Vasant Fiesta at GTU-SET College: A Celebration of Talent and Creativity

The Vasant Fiesta at GTU-SET College celebrated cultural diversity and creativity from February 19th to 23rd. Traditional Day started with students in sarees and kurtas engaging in Garba dances, promoting unity. Bollywood Day followed, with students dressing as iconic film characters, adding glamor to their costumes and performances. Mis-Match Day featured quizzes and games, fostering camaraderie. Group day showcased artistic talents through painting and crafting, transforming the campus. The event culminated in Executive Day's debate, highlighting students' oratory and critical thinking skills. Overall, the fiesta united the college community, celebrating talents and cultural heritage through engaging activities.

BIS Club Activity:

Institutional Events and Activities

Sports Festival:

The School of Science recently hosted a dynamic two-day sports festival to promote a healthy lifestyle and foster camaraderie among students and faculty. The event featured various sports, from indoor games like Chess, Carrom, Badminton, and Table Tennis to outdoor competitions including Kho-Kho, Volleyball, Tug of War, Cricket, and Football. A total of 98 students participated in this event. The festival commenced with an inspiring inaugural ceremony led by Director Prof. (Dr.) S.D. Panchal emphasizes the values ceremony that recognized participants for their dedication and sportsmanship, of discipline and teamwork. Day 1 showcased intense cricket matches and engaging Kho-Kho contests alongside spirited performances in indoor games, highlighting agility and precision. Day 2 continued with competitive basketball, cricket, and volleyball finals, where teams like High Rise 11 and BE Computer excelled, demonstrating skill and teamwork. The festival concluded with a gripping tug-of-war competition, strategic chess battles, and a lively football match, culminating in a celebratory Trophy and Medals Distribution reinforcing a solid sense of tug-of-war competition among all involved.

Voter Awareness Initiative

Participated in the **"Mera Pehla Vote Desh Ke Liye"** campaign from 28 February to 06 March 2024. Activities included watching the "Main Bharat Hoon" video, promoting the Voter helpline app, creating posters and slogans, taking a pledge, and social media engagement.

About GTU

Vision:

To be a global university for the creation and dissemination of knowledge and Innovation in Science & Technology, Humanities and Multidisciplinary domains for sustainable development and enrichment of human life.

Mission:

To develop centres of academic excellence at university premises and at affiliated colleges in domains of science, engineering, technology, management, and environment for imparting comprehensive education, training, and research infrastructure as per the nation's requirements.

To build resources, facilities, proficiencies and other related infrastructure of global standard for the development of knowledge, skills, and competencies in the various educational domains.

To develop research-oriented pedagogy for flourishing ideas and to nurture innovators, entrepreneurs and professionals of tomorrow

To build and enhance collaborations with other academic, research, industry, and government organizations as well as NGOs across the globe so that education, training and research at university and its affiliated colleges become aligned with national and global level requirements.

To encourage multidisciplinary research and develop flexible learning ecosystem.

About GTU - SET

Vision:

To create an ecosystem in education and research that provides socially responsible, globally acceptable technocrats, innovators and entrepreneurs

Mission:

To develop state-of-art research facilities with well-equipped academic infrastructure

To establish strong collaborations with research organizations, Institute of national importance and Industries that promote research and consultancies

To encourage innovative practices to produce innovators and entrepreneurs

To leverage International linkages of the University to establish strong international out reach.

Why "KANASH"?

"Expressing a gratitude to the all stakeholders of GTU-SET"

K : Knowledge

A : Achievement

N : Nurturing

A : Acknowledgement

S : Sustainability

H : Happiness

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Designed by: Mr. Harish S. Vaghela, Office Assistant, GTU-SET

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(1) M.E. – Computer Engineering
(Cyber Security)
AICTE Approved
Duration: 02 Years
Intake: 30
Inception Year: 2017

(2) Post Graduate Diploma in Data Science
Duration: 01 Year
Intake: 30
Inception Year: 2020

(3) M.E. – Computer Engineering
(Internet of Things)
AICTE Approved
Duration: 02 Years
Intake: 18
Inception Year: 2021

(4) M.E. – Computer Engineering
(Artificial Intelligence and Data Science)
AICTE Approved
Duration: 02 Years
Intake: 18
Inception Year: 2022

(5) M.E. – Civil Engineering (Structural Engineering)
AICTE Approved
Duration: 02 Year
Intake: 18
Inception Year: 2022

(6) B.E. – Computer Engineering
Duration: 04 Years
Intake: 60
Inception Year: 2023

(7) B.E. – Electronics & Communication
Duration: 04 Years
Intake: 30
Inception Year: 2024

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