



Gujarat Technological University Graduate School of Engineering and Technology

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KANWASH

Reflection of GTU-GSET Activities



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CONTENT

SR. NO.	CONTENT	PAGE NO.
1	GTU-GSET ACTIVITIES	1
2	GTU-GSET FACULTY/STAFF ACTIVITIES	2
3	GTU-GSET STUDENT ACTIVITIES	8
4	RESEARCH CONTRIBUTION	14
5	NEW ARRIVALS	16
6	CREATIVE CORNER	17
7	GLIMPSE OF UG ORIENTATION	19
8	GTU – GSET IN MEDIA	20

GTU - GSET ACTIVITIES

Various Technical and Non-technical workshops, seminars, training and faculty development programs have been organized by GTU - Graduate School of Engineering and Technology during July' 2023 to September' 2023. Some of these programs include:

FDP/STTP/Training program/workshop organized:

Gujarat Technological GTU-Graduate School of Engineering and Technology organized five days short term training program on **“Cyber Threat Intelligence and Digital Forensics”** from 12th September 2023 and 16th September 2023 under Information Security Education and Awareness (ISEA). As industrial processes become more interconnected and reliant on digital systems, the need for robust cyber security measures becomes even more critical. Here's why cyber security is essential in Industry 4.0. A lot of crucial research studies and implementations have been done in order to enhance the technology through Cyber Security. However, there are still a lot of challenges and issues that need to be addressed to achieve the full potential of Cyber Security. To understand and cover up these challenges, this STTP has been arranged to provide a platform to do hands on for the Cyber Security applications. The sessions in this STTP have been delivered by the renowned experts such as Dr. Aakash Thakar (RRU), Mr. Jamin Somani, Mr. Rohit Tyagi (Scientist, ISRO), Ms. Yamini Savaliya and Mr. Ankit Gandhi. Total of 40 participants from the industry and academics have participated. This STTP has been coordinated by Prof. Deepak Upadhyay and Prof. Margam Suthar (Assistant Professor, GTU-GSET).



Induction Program for first year under graduate (Computer Engineering) students:

The goal of engineering education is to train engineering graduates well in the branch of admission, have a holistic personality and must have the desire to serve society and the nation. It is needed to cultivate



human values in engineering graduates to fulfil their responsibilities as an engineer, a citizen and a human beings. Considering the various social backgrounds and whether a student comes from urban or rural areas they differ in many of their life skills and their abilities and thinking. To overcome such issues, it is necessary to arrange the orientation program and to create an environment for students so that they feel comfortable, find their interests and explore their inner beings, create bonding with other students, establish relationships with teachers, work for excellence, get a broader view of life and practice human values to build characters. GTU –

Graduate School of Engineering and Technology has organized 72 hours orientation/Induction program for the newly admitted students of UG – Computer Engineering from The Induction Program covers the various activities like Virtual Activity, Creative Arts, Literary, Proficiency Module, Lectures by eminent People and Innovations which enable them to overcome all such issues and motivate them to perform well in their chosen branch of admission.

GTU-GSET FACULTY/STAFF ACTIVITIES

Numbers of academic prominence, prestige, renowned fellowships, research grants, associateships, specified lectureships, desired awards and medals have been granted on faculties in recognition of their academic and social achievements, during the last 3 months. Faculty members have contributed as a resource person in number of expert talks and workshops. Some of the distinctions include:

Award/Appreciation received by faculty members:

(1) Prof. S. D. Panchal, Professor, GTU-GSET

Served as a mentor in International Experience Program (IEP) jointly organized by Gujarat Technological University and Laurentian University, Canada during 6th July 2023 to 13th August 2023. He has supported the students and coordinated with the professors of LU in teaching of Mobile Computing & Wireless Technology and Machine Learning.



(2) Prof. P. S. Mann, Associate Professor, GTU-GSET

Received Certificate of Gratitude by Dewang Mehta Foundation Trust as Jury Member for Dewang Mehta IT Awards, 2023.

(3) Prof. Raj Hakani, Assistant Professor, GTU-GSET

The team of GTU ROBOCON and as mentor received the SMC Corporation Award for Great technical skill and accurate Robot in the International level ROBOCON competition organized at Cambodia on 27th August 2023.

(4) Prof. Raj Hakani, Prof. Rutika Ghariya Assistant Professor, GTU-GSET & Mrs. Dhvani Hakani, Ph.D Research fellow (ADF), GTU-GSET

Received certificate of recognition for outstanding efforts as a distinguished alumnus on the occasion of the 13th foundation day of GIC on (02nd AUGUST, 2023) organized by Gujarat Technological University-Innovation & Start-up Center.

Faculty members as Resource Persons:

(1) Prof. Deepak Upadhyay, Assistant professor, GTU-GSET

- (1) Delivered an expert session "**Network Security**" in Karnavati University, Ahmedabad on 12th September 2023.
- (2) Conducted Expert Talk on **Cyber security awareness** for Union bank employees Union Bank under Cyber Jaagrookta Diwason 02.08.23



(2) Prof. Raj Hakani, Assistant Professor, GTU-GSET

- (1) Delivered an expert session on "**Hands-on practice on Arduino using Tinkercad**" for Ankur International School on 5th August 2023.
- (2) Delivered Expert Session on "**How to Make Line Follower Robot**" for International Students of GTU on 6th August 2023.

(3) Prof. P. S. Mann, Associate Professor, GTU-GSET

- (1) Delivered an expert talk on "**Nature inspired metaheuristic for optimization problem(s)**", during Short-Term Training Program (STTP) on "Applications of AI/ML in Biomedical Signal Processing and Computer Vision (BSPCV)" at Pandit Deendayal Energy University (PDEU) on 21st July 2023.
- (2) Delivered an expert talk on "**Fraud Detection and Cyber Security & Best Practices of Fraud Detection and Prevention**" during Two-week ITEC Course on Financial Fraud Investigation Training Iteration-II for Nepal Police Officers at Rashtriya Raksha University (RRU), Gandhinagar on 12th September 2023.

(4) Prof. S. K. Hadia, Associate Professor, GTU-GSET

- (1) Delivered an expert session on "**Basics of Embedded System and Iot based Projects**" in a two week internship on embedded system design for diploma students organized by IDEA Lab, GTU on 13th August 2023.
- (2) Delivered an expert session on "**Data Collection, Validation and Labellings**" in a two week internship on Implementation of Data Science Life Cycle on Real-time Dataset for UG students organized by GSET, GTU on 27th July 2023.

(5) Prof. Rutika Ghariya Assistant Professor, GTU-GSET

Delivered an expert session on "**Hands-on session on basics of IOT and its applications**" in two week internship on embedded system design for diploma students organized by IDEA Lab, GTU on 19th August 2023.

(6) Prof. Soniya Jain, Assistant Professor, GTU-GSET

Delivered an expert talk on topics named (i) **Model Visualization** Using Matplotlib and pandas for visualization, advanced techniques- seaborn, bokeh, (ii) **Data understanding data sampling**, probability distribution, descriptive statistics, inferential statistics, Central Limit Theorem and (iii) **Advanced Statistics for Data Understanding (Part-2)** Confidence Intervals, Hypothesis Testing, Z-test, T-test, Chi-Square Test, F-Test and ANOVA for UG students entering in the final year in One-week internship organized at GTU-GSET during 29th July 2023 to 3rd August 2023.

Technical & Non-Technical Contribution:

Faculty members of GTU – GSET have participated in more than 10 technical seminars/workshops/FDPs/STTPs. They have contributed in various technical and non-technical activities as well as students and the faculty members of different organizations visited GSET facilities. Some of the distinctions include:



Visit of GTU-GSET labs

Over 30 students and faculty members from the Computer Department at L.D. College of Engineering visited the Cyber Security Department and explored the Cybersecurity and Blockchain Labs, where they learned about the current cybersecurity scenario and different domains. Initially, students and faculty members were warmly welcomed by the GSET team who gave a brief introduction about GTU - GSET & the Cybersecurity Department to everyone. Moreover, Prof. Deepak Upadhyay shared knowledge about what Cyber Security is, the different types of domains in cybersecurity, and the tools used for investigations. Respected Director Dr. S.D. Panchal also shared his views on cybersecurity and how technocrats can help the nation. As engineering students, we can provide solutions to problems and conduct awareness sessions. He also described the different domains in cybersecurity, such as Digital Forensics, SoC, Network Security, and VAPT. Students learned about some VAPT and Digital Forensics tools, mobile forensic tools, computer forensic tools, and demos on the FRED workstation (Belkasoft), vulnerability assessment tools (e.g., Nessus), and pen-testing tools (e.g., Burp Suite). Furthermore, Prof P.S Mann in the Blockchain Center of Excellence explained to the students about blockchain, smart contracts, how blockchain works, its history, applications, advantages, disadvantages, and some blockchain tools. The interaction was fruitful and helpful in selecting internship projects.

Industry/Organization Visit

Visited (1) eInfochips - An Arrow Company, Ahmedabad on 15th September, 2023 and interacted with Mr. Nirav Nanavati, Associate Director, ASIC and his team. Prof. S. D. Panchal, Dr. R. A. Thakker, Director, RDC, Prof. Gautam D. Makwana visited the company, (2) Institute of Plasma Research (IPR), Gandhinagar on 21st September, 2023 and interacted with Prof. Subroto Mukhrajee, Dean - Administration and his team. Prof. S. D. Panchal, Dr. R. A. Thakker, Director, RDC, Prof. Gautam D. Makwana visited IPR, and (3) Physical Research Laboratory (PRL), Ahmedabad on 25th September, 2023 and interacted with Prof. Anil Bhardwa, Director, PRL, Prof. D. Pallam Raju, Dean, PRL, and Prof. R. D. Deshpande, Registra, PRL. Dr. R. A. Thakker, Director, RDC, Prof. Gautam D. Makwana and Prof. S. K. Hadia visited the PRL to strengthen Institute-Academia partnership by research collaboration, Ph.D. Program, Internship for PG students, Industry-sponsored courses and laboratories.

(1) Prof. S. D. Panchal, Professor, GTU – GSET

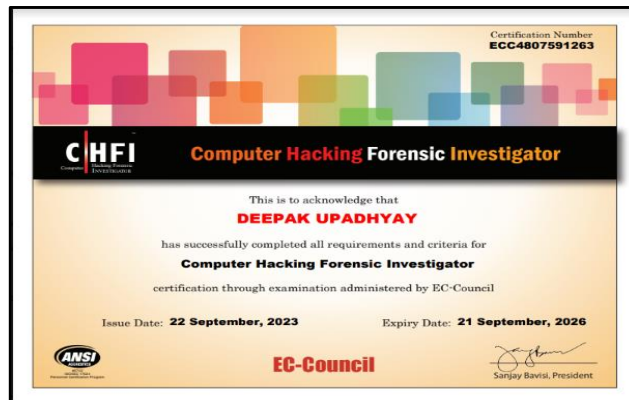
Received certificate for completion of course on “Leadership Skills”, an online non-credit course authorized by IIMA - IIM Ahmedabad and offered through Coursera on 27th August 2023.





(2) Prof. Deepak Upadhyay, Assistant Professor, GTU-GSET

- (1) Conducted two week internship in “**cyber security**” which contains basic skills in cyber security and research project in the domain during 27th July 2023 to 10th August 2023.
- (2) Received certificate of completion for the MOOC Course on “**Social Media Data Analytics**” on 12th August 2023.
- (3) Received certificate from Palo Alto Network Academy for completion of **Network Security Fundamentals**-EduSkills Foundation-B-04/06/21 on 13th July 2023.
- (4) Received Certificate for qualifying the EC-Council Exam for Computer Hacking and Forensics Investigation



(3) Prof. P. S. Mann, Associate Professor, GTU-GSET

- (1) Appointment as Expert Panel Member of AICTE -PARAKH Project (A project of national importance supported by World Bank) by AICTE, New Delhi on 5th July 2023.
- (2) Appointed Panel expert in “The Inventor Challenge 2023” jointly organized by AICTE in association with Arm Education and STMicroelectronics on 25th July 2023.
- (3) Appointed TPC reviewer for 3ICT2023 (2023 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT)), organized by University of Bahrain, Bahrain on 19th July 2023.

(4) Prof. G. D. Makwana, Associate professor, Prof. S. D. Panchal, Professor, Prof. Mahesh Panchal & Prof. Rutika Ghariya, Assistant Professor, GTU-GSET



Visited NASSCOM CoE : IoT-AI at Research Park, IIT, Gandhinagar and interacted with **Mr. Amul Saluja**, Senior Director and Center Head, CoE and **Mr. Yagndeeep Gohil**, Startup Engagement Head regarding internship and placement opportunities and to explore various facilities of Industry 4.0 laboratory. Including the placement officers, 6 students of PG - AI & DS participated in the visit. Prof. G. D. Makwana coordinated the visit.



(5) Prof. Raj Hakani, Assistant Professor, GTU-GSET

- (1) Invited as Esteemed Judge for National and International ROBOTICS Competition WSRO on 13th September 2023 and 14th September 2023.
- (2) Invited as Jury Panel for Screening of SSIP 2.0 Project on 2nd August 2023.
- (3) Received DRONE Pilot License approved by DGCA on 31st July 2023.
- (4) Coordinated Internal Hack-A-Thon for SIH 2023 as a Nodal Officer (with skill coordinators of various program, GTU-GSET) on 26th September 2023.

Program Placement Officers

Conducted 5 aptitude tests for the students of PG in Cyber Security, PG in Internet of Things, PG in AI & DS and PG in Civil (Structure Engineering) as a part of the pre-placement activities. The test is coordinated by **Prof. Gautam D. Makwana, Prof. Seema Joshi, Prof. Mahesh Panchal, Prof. Rutika Gharia, and Prof. Apurva Dave.**

(1) Prof. Seema B. Joshi, Assistant Professor, GTU-GSET

- 1) Organized pre-placement talk and placement drive of Silver Touch Technologies Ltd., Ahmedabad for the PG-Cyber Security PG scholars of Batch: 2021-23 and Batch: 2022-24 on 8th August 2023.
- 2) Organized expert sessions that were delivered by GTU alumni on various technical topics such as 1. Tableau: A Data Visualization Tool, 2. Making Innovation an Everyday Habit, and 3. IoT Security Assessment: Pentester's Approach under Skill Enhancement Expert Talk Series 2023 was organized by the GTU Alumni Association from July to September 2023. GTU-GSET UG and PG students participated and enhanced their skills.

(2) Prof. G. D. Makwana, Associate professor, GTU-GSET

- (1) Served as an External Expert Member of the Board of Studies (BOS) for the Department of EC Engineering, Hasmukh Goswami College of Engineering, Faculty of Engineering & Technology, Monark University.
- (2) Appointed TPC reviewer for 3ICT2023 (2023 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT)), organized by University of Bahrain, Bahrain on 1st July 2023.
- (3) Appointed as the Editorial Board Member of the Journal-Intelligent Control and System Engineering.
- (4) Served as Jury Member, Internal Hackathon 2023 conducted by GTU on 25th September 2023 as a part of the Smart India Hackathon 2023.
- (5) Enrolled in one year PG Diploma in Intellectual Property Right (PGDIPR) at GTU.

(3) Prof. S.K. Hadia Associate professor, GTU-GSET

- (1) Served as a reviewer for DATA'23-Bahrain (2023 International Conference on Data Analytics for Business and Industry (ICDABI)) on 2nd September. 2023
- (2) Appointed as TPC reviewer for IEEE-ICM2023, Abu Dhabi, UAE (2023 International Conference on Microelectronics (ICM)) on 15th July, 2023



- (3) Served as a reviewer for International Journal of Science and Technology(IJST), Scopus Indexed Journal on 16th August, 2023
- (4) Appointed as TPC reviewer for 2023 International Conference on Decision Aid Sciences and Applications (DASA)- 2023 on 17th July-2023.
- (5) Served as a reviewer for 4th International Conference on Data Analytics for Business and Industry (ICDABI)-2023 on 26th September 2023.

(4) Prof. Margam Suthar, Assistant Professor and Jeet Joshi, Skill Coordinator, GTU-GSET

The First batch of the “Two week Internship Program on Scope of Cloud computing with Industry 4.0” was held at the Bosch Center of Excellence in Automation, from 27th July to 10th August 2023. There have been 51 students from various affiliated colleges have participated in this training.

(5) Jeet Joshi, Skill Coordinator, GTU-GSET

Conducted online training of Amazon approved AWS Cloud Computing for 10th batch from 23rd August 2023 to 8th September 2023.

(6) Prof. (Dr.) S. D. Panchal, Prof. P. S. Mann, Prof. Mahesh Panchal, Prof. Komal D. Prajapati

Organized lecture on the topic named "**Foundations of Blockchain**" in the lecture series under the Centre of Excellence for Blockchain Technology in August and September 2023. The topics covered as Blockchain Evolution, Blockchain Technology, types of blockchain, ethereum blockchain, ethereum blockchain key properties, anatomy of block, Cryptography, accounts and wallets, consensus algorithm, smart contract, EVM, solidity. Around 36 participants including PG students, research scholars, and faculty members from different institutes across the state had participated.



Induction program for BE Computer Engineering

GTU-GSET STUDENT ACTIVITIES

Student Club activities:

To nurture and explore various hidden talents & skills of the students, the Institute has established seven clubs (SAPTAK) in technical and non-technical domains. Each club has its own objectives and guidelines. The clubs are handled by the students and organize activities during a semester. Some activities during last quarters are:

Techfest-Sports-Cultural Club:

Raksha-Bandhan celebration

On the 25th August, 2023 Raksha-Bandhan was celebrated at GTU-Graduate School of Engineering in the presence of respected Director, S. D. Panchalsir ,faculty members, fellow students, and respected didi from BrahmaKumaris. Students from various backgrounds come together on this special occasion to partake in the traditional rituals. Then respected Vecna Didi gave a speech on the spiritual meaning behind all the rituals followed by Hindus in Raksha-Bandhan.



Teachers Day Celebration

On the 5th of September, 2023, a celebration was held in the Graduate School of Engineering and Technology on the occasion of National Teacher's Day to mark the birth anniversary of Dr. Sarvepalli Radhakrishnan. Teacher's Day is a special occasion that is celebrated to honor the dedicated educators who shape the future of our society. The students of undergraduate Computer Engineering contributed a lot to the event by volunteering in various activities like speech delivery, poster making, card making, etc. to appreciate the gurus.





Janmashtami Celebration

To seek the blessing of Lord Krishna, Janmashtami was celebrated on the 6th of September, 2023 at GTU-Graduate School of Engineering and Technology. The event began by offering a beautiful prayer to lord Krishna through Shri Krishna Aarti. After the ritualistic prayer, all gatherers receive Panchamrit. Ahead of this occasion, “Dahi-Handi” and “Ras-Garba” were organized.



National Engineer’s Day



On the 15th of September, 2023, on the occasion of National Engineer’s Day, which is celebrated in respect of the late Sir M. Visvesvaraya, an exciting event was organized at the Graduate School of Engineering and Technology, GTU by the cultural club. A general knowledge quiz was also held in which the top ten teams were selected for an adventurous technical Track-N-Hunt game. The remaining teams were offered to perform various activities like photography, painting, poster-making, paper crafts, etc. The winners of respective activities were rewarded with prizes.

Cyber Security Club

Skill Development Session on Nessus

The skill development session was arranged on “Nessus” with the aim to provide participants with insights about Nessus tool for assessing the security of websites on 24th August 2023. The session has covered various aspects of using Nessus, including setup, configuration, scanning, interpreting results, and mitigation strategies.

Graduate School of Engineering and Technology
Cyber Security Club

**Skill Development
Session On Nessus**

Parth Mistri
Vulnerability Assessment Tool
(Nessus)

Thursday
24 August 2023

2:00 TO 3:00 PM

Faculty Mentor: Prof. Deepak Upadhyay
Coordinator: Pranav Patel (221370759016)



Birthday celebration @GSET



Student Internship:



Chauhan Brijesh Hanumantsingh, P.G. (Cyber Security), batch - 2022- 24, has been selected as an Intern at DRDO, Ahmedabad.

Galathariya Dharmikbhai Tribhovanbhai, Patel Darsh Kishore, Patel Miral Rajeshbhai, Patel Nandinee Jatinkumar P.G. (Cyber Security), batch - 2022- 24, have been selected as an Intern at SAC-ISRO, Ahmedabad.



Mr. Brijesh Mangroliya, P.G. (Internet of Things), batch - 2022- 24, has been selected as an intern at Upeya Technolgy, Gandhinagar.

Ms. Bhargavi Panchal, Ms. Zarna Solanki, Mr. Vihar Patel, P.G. (Internet of Things), batch - 2022- 24, have been selected as an intern at SAC-ISRO, Ahmedabad.





Mr. Kadiya Sarvagna Kalpesh, P.G. (Artificial Intelligence and Data Science), batch - 2022- 24, has been selected as a Blockchain developer at Lampros Tech, Ahmedabad.



Student Placement:



Ms. Parmar Ashasri Anandkumar, P.G. (Cyber Security), batch - 2021- 23, has been selected as an Assistant Professor at Dr. V R Godhaniya Engineering College, Porbandar.

Mr. Patel Vaibhavgkumar Kishorbhai, P.G. (Cyber Security), batch - 2021- 23, has been selected as a Jr. Engineer - Networks at Microlink Solutions Private Limited, Ahmedabad.



Mr. Bhargav Bharwad, P.G. (Cyber Security), batch - 2021- 23, & **Ms. Harsha Gangadiya, P.G. (Internet of Things)**, batch - 2021- 23 have been selected as an officer on special duty (OSD) at GTU-GPERI, MAHESANA.



Mr. Bhargav Kishorbhai Shah & Mr. Krutik Vinodkumar Patel P.G. (Internet of Things), batch - 2021- 23, have been selected as Associate Engineer and R & D Engineer respectively at Masibus Automation & Instrumentations Pvt. Ltd, Gandhinagar.





Ms. Precius Wallace, P.G. (Internet of Things), batch - 2021- 23 has been selected as a Design Engineer at Pronesis Technologies, Ahmedabad.

Ms. Kinjal Manishkumar Patel, P.G. (Internet of Things), batch - 2021- 23 has been selected as a Trainee Engineer at TATA Consultancy Services Limited (TCSL).



Mr. Parixit Udaynarayan Mishra, P.G. (Internet of Things), batch - 2021- 23 has been selected as an Embedded Software Engineer at Singularity Labs Private Limited, Ahmedabad.

Chauhan Krishn Kalicharan, P.G. (Internet of Things), batch - 2021- 23 has been selected as a Programming Engineer at Veer Electronics Pvt. Ltd., Ahmedabad.



Ms. Devangi Parekh, P.G. (Internet of Things), batch - 2021- 23 has been selected as a Jr. iOS developer at Radixweb Software Services Pvt Ltd, Ahmedabad.

Ms. Bhavna Modhavadiya, P.G. (Internet of Things), batch - 2021- 23 has been selected as an Embedded Software Engineer at eByteLogic, Ahmedabad.





Ms. Bhoomi Vekariya, P.G. (Internet of Things), batch - 2021- 23 has been selected as an Intern at E-infochips, an arrow company, Ahmedabad.

Student Activities:

Students of GTU-GSET have contributed in various technical and non-technical activities, attended number of events and completed various technical course during last three months. Some of the distinctions include:

Sr. No.	Student Name	Branch	Activity Detail
1	Bhalala Ronakbhai Bharatbhai	Semester-3, PG (Cyber Security)- Batch 2022-24	<ul style="list-style-type: none">Delivered Practical sessions at Swarnim university on BDA, ML, and ethical hackingInvited as a resource person at hacktech international it security conference.Presented paper in research pe charcha-2023 at Kaushalya the skill university.
2	Bhavini Patel	Semester-3, PG (Cyber Security)- Batch 2022-24	Course Completed on Digital Forensics Essentials (DFE) from EC Council.
3	Sushilkumar Prakashbhai Dangiya	Alumni, PG (MCNT)- Batch 2020-22	Received certificate of Appreciation for Participating in Blood Donation Camp at Rajbhavan, Gandhinagar
4	Saurabh Naval Tiwari	Alumni, Post Graduate Diploma in Data Science- Batch 2022- 23	Participated in : <ul style="list-style-type: none">Environment and Lifestyle Quiz by Ministry of Environment, Forest, and Climate Change.4th National Online Quiz on Insolvency and Bankruptcy Code, 2016
5	Patel Bhargav G.	Semester – 2, PG (Internet of Things), Batch 2022-24	Attended Semico india 2023 expo at mahatma mandir.
6	Gaindrum Sahu	Semester-3, PG (Cyber Security)- Batch 2022- 24	Completed course on: <ul style="list-style-type: none">AWS Certified Cloud PractitionerISC2 Certified in Cyber Security.
7	Kadia Kaushal K and other students from PG – Structural Engineering & UG – Computer Engineering	Semester-1, Structural Engineering- Batch 2023-25 & UG, Computer Engineering – Batch 2023-26	Organized National Engineer’s Day

RESEARCH CONTRIBUTION

Research is the parameter which connects academia with industry and strengthens the post graduate institute in actual means. The faculties and students of GTU-GSET have published and presented research papers/articles in reputed journals and conferences respectively. The faculties have reviewed research papers/articles for various journals and conferences.

Research paper Published/reviewed:

(1) Prof. S. D. Panchal, Professor, GTU-GSET

Published a research paper on **"Zone Based Traffic Adaptive Mechanism for Traffic Light Control using VANET"**, International Journal of Computing and Digital Systems ISSN (2210-142X) Int. J. Com. Dig. Sys. 14, No.1 (SCOPUS indexed) in September 2023.

(2) (Dr.) J. A. Amin, Professor, GTU-GSET

(1) Published Book chapter named **"Influence of Epistemic Uncertainty on the Seismic Vulnerability of Indian Code-Compliant RC Frame Building"** in Lecture Notes in Civil Engineering, springer with Kaushik Gondaliya, Vishisht Bhaiya, Sandip Vasana, Atul Desai on 10th July 2023.

(2) Published a research paper on **"Wind-Induced Interference Effects due to Partial Shielding of Building"**, Springer, <https://doi.org/10.1007/s40030-023-00756-3> on 12th September 2023.

(3) Ms. Arpita Maheriya, ADF (PhD research fellow) & Prof. S. D. Panchal, Professor, GTU-GSET

Published a research paper on **"A Heuristic Approach to Protect Privacy of Patient's Sensitive Data with Prediction of Disease"**, ECB (indexed with Scopus, UGC care etc), vol 12, issue 10, doi: 10.48047/ecb/2023.12.si10.00319 on 13th August 2023.

(4) Aanal Raval (PhD research fellow) & Prof. K. R. Borisagar, Associate Professor, GTU-GSET

Published a research paper on "Document Recommendation: An anatomization of neoteric advancements, problems and potential scope", ECB, vol 12, issue 10, doi- 10.48047/ecb/2023.12.si10.00317 on 13th August 2023.

(5) Prof. P. S. Mann, Associate Professor, GTU-GSET

(1) Reviewed a research paper on "A sensor node localization approach using a Nature-inspired Algorithm in a distributed Wireless Sensor Network" The Journal of Supercomputing, Springer (IF 3.3) during July 2023.

(2) Reviewed a research paper on "Optimized empirical model based on improved artificial bee colony algorithm for estimate daily solar radiation in the temperate continental zone of China" Computers and Electronics in Agriculture, Elsevier (IF 8.3) during July 2023.

(3) Reviewed research paper on "Comparative Analysis of LEACH, SEP, EDDEEC, and EESAA Cluster-Based Energy-Aware Wireless Sensor Network Routing Protocols" Indonesian Journal of Electrical Engineering and Informatics. (Scopus Index) during September 2023.



(6) Prof. G. D. Makwana, Associate Professor, GTU-GSET

- (1) Published the research paper in IEEEExplore titled on "Triple-band antenna for GPS, Sub-6 GHz 5G and WLAN Wireless Applications", IEEE Wireless Antenna and Microwave Symposium (WAMS), published on 13th September, 2023, with Devendra H. Patel, DOI: <https://doi.org/10.1109/WAMS57261.2023.10242992>
- (2) Published an Indian Patent on "**AI and Machine Learning based Approach for Predicting Shortest Path in Google Map****GOOGLE MAP**" on 8th September 2023.
- (3) Reviewed research papers on (1) Fusing Deep Learning and Ensemble Techniques for Comic Character Emotion Recognition, (2) Heterogeneous disease prediction by using computational learning (ML): A Review, (3) Unleashing the Power of Self-Supervised Learning: A Multi-Domain Exploration, (4) Analyzing Tech-Driven Solutions for Overcoming Challenges in the Indian E-commerce Landscape, (5) Exploring Approximate Memory for Energy-Efficient Computing, (6) Increasing Production Effectiveness: Unveiling the Role of Buffer Inventory in Parallel Machine Scheduling with Machine Breakdowns, (7) Traffic Signal Violation Detection Through Computer Vision of 2023 International Conference on Data Analytics for Business and Industry (ICDABI) organized University of Bahrain. Kingdom of Bahrain.

(7) Prof. K. R. Borisagar, Associate Professor, GTU-GSET

Patent granted on "**System to control an apparatus using speech signals and method thereof**" on 25th September 2023.

(8) Prof. Seema B. Joshi, Assistant Professor, GTU-GSET

- (1) Became a professional member of IEEE, IEEE (Women in Engineering) and IEEE Computer Society (Member ID: 99498837) during, July 2023.
- (2) Reviewed a research papers on (1) "Design and Application of Automatic Scoring System for English Composition Based on Artificial Intelligence Technology", July 2023, (2) "Adopting a Heterogeneous Graph Attention Mechanism in Effective Source Code Summarization", August 2023 and (3) "A QoS-aware Resource Allocation Method for Internet of Things Using Ant Colony Optimization Algorithm and Tabu Search", September 2023, International Journal of Advanced Computer Science and Applications (IJACSA), The Science and Information (SAI) Organization (Scopus and WoS Index) during July 2023.

(9) Ms. Arpita Maheriya, ADF (PhD research fellow)

Reviewed a research paper on "Cardiac disease prediction using AI algorithms with SelectKBest" for the journal named The Medical & Biological Engineering & Computing, Springer Nature during August 2023.



(10) Prof. Raj Hakani, Assistant Professor, GTU-GSET

- (1) Published an Indian patent on "**Smart Garbage Segregation Robot**" with Rajesh Rishi, Priya Lokare, Madhu S. Mallisetty, Aruna Balasaheb Salunke, Neha Saxena, Shubham Dilip Shedge, Raj Arvindkumar Hakani on 07th July 2023.
- (2) Published a research paper on "**Recent Advancements in the Augmentation of Interactive Gloves for Quantifying Applied Effort**" in 4th International Conference on Electronics and Sustainable Communication Systems (ICESC) on 31st August 2023.

NEW ARRIVALS

LIBRARY NEW ARRIVALS:



Student/Professor's Blog:

Mr. Ronak Bhalala, Semester-3, PG (Cyber Security)- Batch 2022-24

"Learning from our Indian scripture 'The Bhagwat Geeta'"

Here are 10 learnings from the Bhagavad Gita that can be applicable in student life:

(1) Embrace Dedication in Your Work:

The teachings of the Bhagavad Gita emphasize the importance of dedication to our tasks, urging us to invest our best efforts without undue attachment to the outcomes. This lesson is particularly pertinent for students who may encounter challenges and setbacks in their educational journey. By immersing themselves in their work and giving it their all, students can enhance their prospects for success.

(2) Cultivate a Robust Work Ethic:

The Bhagavad Gita underscores the cultivation of a robust work ethic. This entails being disciplined, persistent, and unwavering in focus. It involves a readiness to toil diligently, even in the face of adversity. For students aiming to excel academically and in their future endeavors, a strong work ethic is indispensable.

(3) Practice Humility and Learn from Mistakes:

In accordance with the Bhagavad Gita, humility and the capacity to learn from one's errors are invaluable virtues. No one is immune to imperfection, and errors are an intrinsic part of the learning process. The crucial factor is deriving wisdom from our mistakes and pressing ahead. Students who exhibit humility and a willingness to glean lessons from their missteps are more likely to achieve enduring success.

(4) Extend Compassion and Support to Others:

The Bhagavad Gita instructs us to be compassionate and supportive of others, a lesson that holds great relevance for students. Striving to be considerate and encouraging towards classmates and educators can contribute to the creation of a positive and productive learning environment.

(5) Cultivate Contentment:

The Bhagavad Gita advocates contentment with one's current circumstances. This does not imply forsaking aspirations for improvement, but rather the expression of gratitude for the blessings already received. Students who cultivate contentment are less susceptible to stress and anxiety, and more inclined toward happiness and fulfillment.

(6) Cultivate Positivity and Optimism:

The Bhagavad Gita encourages the cultivation of positivity and optimism. This involves maintaining a constructive outlook and having faith in one's abilities. Optimistic students are more likely to excel in their studies and future careers.



(7) Persevere and Persist:

The Bhagavad Gita champions perseverance and an unwavering commitment to one's objectives. Regardless of the difficulties encountered, the message is clear: never abandon your dreams. Students who persevere and remain resolute are more likely to realize their goals.

(8) Embrace Forgiveness and Release Grudges:

The Bhagavad Gita promotes forgiveness and the release of grudges. Clinging to grudges is detrimental, inflicting harm upon oneself. Through forgiveness and letting go of past grievances, individuals can liberate themselves from negative emotions and move forward. Students who are forgiving and capable of releasing grudges tend to experience greater happiness and fulfillment.

(9) Have Confidence in Yourself and Higher Powers:

The Bhagavad Gita underscores the importance of self-confidence and faith in higher powers. Faith can empower individuals, providing them with the strength and courage to confront challenges and adversities. It also contributes to maintaining a positive and optimistic outlook. Students who possess faith in their abilities and in higher powers are more likely to prosper academically and in their future careers.

(10) Live in the Present:

The Bhagavad Gita teaches the art of living in the present moment, concentrating on the here and now rather than dwelling on the past or fretting about the future. Students who practice living in the present are more inclined to experience contentment and fulfillment. This mindset also enhances their potential for success in both their educational pursuits and future careers.

These represent only a handful of the numerous insights that students can derive from the Bhagavad Gita. Through a dedicated study of the **"Bhagavad Gita"** and the practical application of its principles in their daily lives, students can enhance their prospects for success and lead more joyful and enriched lives.



GSET students and faculty members visited Semicon India 2023

GLIMPSE OF UG ORIENTATION





नेशनल रोबोकॉन स्पर्धा में पाया पहला स्थान इंटरनेशनल रोबोकॉन स्पर्धा में भारत का प्रतिनिधित्व करेगी जीटीयू टीम

पत्रिका न्यूज़ नेटवर्क
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अहमदाबाद. एबीयू एशियन पॅसिफिक ब्रॉडकास्ट यूनिन की ओर से नईदिल्ली में हाल ही में आयोजित नेशनल रोबोकॉन स्पर्धा में गुजरात तकनीकी विश्वविद्यालय (जीटीयू) की टीम ने पहला स्थान प्राप्त किया है।



नेशनल रोबोकॉन स्पर्धा की विजेता जीटीयू टीम।

स्टेज तीन की इस स्पर्धा में देशभर से 68 टीमों ने हिस्सा लिया था। निर्णायक राउंड के लिए जीटीयू सहित 47 टीमों का चयन हुआ था। इस स्पर्धा में रोबोटिक्स टेक्नोलॉजी का उपयोग कर 8 पोल में रिंग डालने का टास्क दिया गया था। इसमें जीटीयू की टीम ने केवल एक मिनट और 41 सेकेंड में सभी 8 पोल में रिंग डालते हुए पहला स्थान प्राप्त किया। जीटीयू के कार्यकारी

कुलपति डॉ.पंकजराय पटेल ने बताया कि नेशनल स्पर्धा जीतने वाली जीटीयू की टीम अब 27 अगस्त को कंबोडिया में होने वाली इंटरनेशनल रोबोकॉन स्पर्धा में भारत का प्रतिनिधित्व करेगी। इस टीम के मेंटर प्रो.राज हक्कानी ने बताया कि जीटीयू की टीम में 9 कॉलेजों के 20 विद्यार्थी शामिल हैं।

ये सभी 8 अलग-अलग ब्रांच के हैं। टीम ने स्पर्धा के लिए न सिर्फ मैकेनिकल हार्डवेयर बल्कि सॉफ्टवेयर, इलेक्ट्रिक सर्किट, 3 डी प्रिंटिंग, एन्कोडर सेंसर पर शोध किया और फिर एक साल की रिसर्च और प्रयास के बाद उसे तैयार किया। इस दौरान एलिफेंट और रेबिट नाम के दो रोबोट बनाए थे।

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GTU team in international ROBOCON



इंटरनेशनल रोबोकॉन स्पर्धा में छठे स्थान पर रही जीटीयू की टीम



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अहमदाबाद. एशियन पॅसिफिक ब्रॉडकास्ट यूनिन (एबीयू) की ओर से कंबोडिया में हाल ही में आयोजित इंटरनेशनल रोबोकॉन 2023 स्पर्धा में गुजरात तकनीकी विश्वविद्यालय (जीटीयू) की टीम छठे स्थान पर रही।

टीम ने इस स्पर्धा में एसएमसी कोर्पोरेशन अवार्ड पाया। जीटीयू रोबोकॉन टीम के मेंटर प्रो.राज हक्कानी ने बताया कि जीटीयू की टीम ने इस स्पर्धा में भारत का प्रतिनिधित्व किया था। उन्होंने कहा कि टीम ने स्पर्धा के प्री क्वार्टर फाइनल में कंबोडिया के विरुद्ध एक मिनट 15 सेकेंड

में ही 220 का स्कोर कर लिया था। जिसमें टेक्निकल स्किल और एक्ज्यूरेंट रोबोट के लिए टीम को एसएमसी कोर्पोरेशन अवार्ड मिला। जून 2023 में नई दिल्ली में आयोजित नेशनल रोबोकॉन स्पर्धा में जीटीयू की टीम ने देश की 68 टीमों को मात देते हुए पहला स्थान पाया था। जिससे वह इंटरनेशनल रोबोकॉन स्पर्धा के लिए चयनित हुई थी। इस टीम में जीटीयू की 9 कॉलेजों के 8 ब्रांच के 20 विद्यार्थी शामिल हैं। इससे पहले वर्ष 2020, वर्ष 2021 में भी जीटीयू की टीम ने इंटरनेशनल रोबोकॉन स्पर्धा में देश का प्रतिनिधित्व किया है। उस समय क्रमशः 5वां और नौवां स्थान प्राप्त किया था।

GTU ROBOCON team represented INDIA in international Robocon Competition

GTUએ વિવિધ કોર્સની પરીક્ષા-પરિણામ અને સત્રનું એકેડેમિક કેલેન્ડર જાહેર કર્યું

» ઓડ સેમેસ્ટરમાં થિયરી અને પ્રેક્ટિકલ પરીક્ષા ક્યારે લેવાશે, સત્ર ક્યા સુધી રહેશે અને પરિણામની તારીખ પણ જાહેર કરી દેવામાં આવી

ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી (જીટીયુ) દ્વારા આખરે એકેડેમિક કેલેન્ડર જાહેર કરી દેવામાં આવ્યું છે. છેલ્લા કેટલાય સમયથી એકેડેમિક કેલેન્ડરને લઈને વિવાદ ચાલતો હતો. જોકે, હવે યુનિવર્સિટી દ્વારા સુધારેલા એકેડેમિક કેલેન્ડર જાહેર કરી દેવામાં આવ્યું છે. જેમાં જુદા કોર્સની ટર્મ ક્યા સુધી રહેશે, પરીક્ષા ક્યાં અને ક્યાં જાહેર થશે તેની પણ વિગતો આપી છે.

યુનિવર્સિટીમાં સૌથી વધારે વિદ્યાર્થીઓ અભ્યાસ કરતાં હોવાથી તેને એકેડેમિક કેલેન્ડરને લઈને લાંબા સમયથી વાદ-વિવાદ ચાલતો હતો. એકેડેમિક કેલેન્ડર જાહેર ન થતાં અભ્યાસક્રમ અને વિદ્યાર્થીઓને પણ મૂંઝવેલી નાની હોવાની ફરિયાદો પણ કરવામાં આવી હતી. કોરોના પછી ઉભી થયેલી પરિસ્થિતિના કારણે અનેક પરીક્ષાના શીટ્સ બેરવાતા સેમેસ્ટર 5નું શૈક્ષિક સત્ર આગામી 9મી નવેમ્બર સુધી રહેશે. વિષયની પરીક્ષા 10મી ડિસેમ્બરથી લઈને 4 ડિસેમ્બર સુધી અને પ્રેક્ટિકલ પરીક્ષા 13મી લઈને 18મી ડિસેમ્બર સુધીમાં લેવાશે. પરિણામ જાહેર કરાશે તેની પણ જુદી જુદી સંખ્યામાં તારીખો જાહેર કરી દેવામાં આવી છે. આજ રીતે એમઆઈ સેમેસ્ટર 5 અને 6નું શૈક્ષિક સત્ર પણ 9મી નવેમ્બર સુધી રહેશે. પ્રેક્ટિકલ અને વિષયની પરીક્ષા ક્યારે લેવાશે તેની તારીખ પણ જાહેર કરી દેવામાં આવી છે. માસિકની વાત એ કે, જુદા જુદા 51 કોલેજ અને સેમેસ્ટરની પરીક્ષા, શૈક્ષિક સત્ર અને પરિણામ જાહેર થશે તેની તારીખ પણ જાહેર કરવામાં આવી છે. વિદ્યાર્થીઓ અને અધ્યાપકોને પરીક્ષા પછી વેકેશન કે અન્ય આયોજન થઈ શકે તે માટે લાંબામાં તપાસ તારીખ જાહેર કરવામાં આવી છે. જોકે, ઓડ ટર્મના સેમેસ્ટર માટે આ સંબંધિત એકેડેમિક કેલેન્ડર જાહેર કરાયું છે.



Declaration of GTU academic calendar



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 - GSET

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 outreach



Why "KANASH"?

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

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-GSET

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

(2) M.E. – Electronics and Communication Engineering
(Mobile Communication and Network Technology)
AICTE Approved
Duration: 02 Years
Intake: 18
Inception Year: 2018

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

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

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

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

(7) B.E. – Computer Engineering (Newly introduced program)
Duration: 04 Years
Intake: 60
Inception Year: 2023

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