

Gujarat Technological University Graduate School of Engineering and Technology

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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 October'2021 to December' 2021. Some of these programs include:

FDP/STTP/Training program organized:

(1)From December 20th to December 24th, 2021, a national level Short-term training program (STTP) on "Cvber challenges for Industry 4.0" was held for faculty, industry delegates, Post Graduate and PhD scholars from AICTE/UGC affiliated colleges as part of



the Information Security Education and Awareness (ISEA) Project Phase II. Experts from the industry, as reputable well as organizations and academics, were invited to deliver lectures on various topics. The purpose of this program was to deliver information on various security elements of Industry 4.0. A total around 50 people attended the workshops to learn more about the current industry challenges and how to solve them. **Dr.** P. S. Mann (Associate Professor, GTU-GSET) and Prof. Seema Joshi (Assistant Professor, GTU-GSET) organized the event.

(2)From December 27 to December 31, 2021, a national level short-term training program (STTP) on "Implementation of Internet of Things **Applications Using Machine** Learning and Deep



Learning" was held. The Information Security Education and Awareness (ISEA) Project - II sponsored this STTP. More than 65 delegates have attended the STTP. The delegates are faculty members, Ph.D. students, and PG students from various institutes across India. Renowned experts from IISc, NITs, and industries have been invited to conduct expert sessions on a variety of topics. An industrial visit is planned as part of the STTP at e-Infochips, Ahmedabad to explore the STTP's theme. Prof. Gautam Makwana (Associate Professor, GTU-GSET) and Prof. Deepak Upadhyay (Assistant Professor, GTU-GSET) coordinated the STTP.

- The Bosch (3)GTU of Excellence Centre in Automation hosted the third industrial automation training program for three-weeks during 7th November 2021 to 29th November 2021. There were 21 students from various affiliated colleges of GTU are participated, and received trainings on Sensors, PLC, Hydraulics, Pneumatics, and Robotics Labs from certified experts from the well-known Industries. The training includes hands on practices. The training session



was coordinated by **Prof. Margam Suthar** (Assistant Professor, GTU-GSET) and **Mr. Jeet Joshi** (Skill development coordinator, GTU-GSET).

(4) From October 4th to October 8th, 2021, an AICTE Training and Learning (ATAL) sponsored online faculty development program on **"IOT and its Applications"** was organized. The goal of this FDP is to provide an





understanding of the concepts of IOT and M2M, as well as to design applications based on IOT architecture and to assess security and privacy issues in IOT. Total 40 participants from various AICTE affiliated institutions and PhD scholars have actively participated in this faculty development program. **Prof. Komal Borisagar** (Associate Professor, GTU-GSET) and **Prof. Raj Hakani** (Assistant Professor, GTU-GSET) coordinated the FDP.

Webinar series by the Industrial expert:

The institute has organized webinars in different domains on every Saturday for the first-year students of M.E CE (Cyber Security), M.E. (MCNT), M.E. (IOT) and PG diploma in Data Science. The purpose of these webinars is to promote research activities and opportunities in the emerging areas of the programs, to explore new technologies and to educate students with recent industry demands. Some glimpse of such activities:

Mr. Rajeev Kumar (1) Prashar, IT-Head Manager at A2IT Pvt. Ltd, Chandigarh has been invited to deliver an online expert session on "Cyber attacks & its security" on 16th October 2021. As a part of the skill enhancement program, this session was arranged for students of ME C.E. (Cyber Security) with an objective to aware students with the basics of Cyber Security and to know about Cryptography Techniques. The session was coordinated by **Dr. P. S. Mann** (Associate Professor, GTU-GSET) and around 32 students have participated in the session.

(2) As part of the skill enhancement program, **Mr. Shitalkumar, Senior Data Scientist (AVP)**, PT Smartfren Telecom Tbk, Indonesia, has been invited to conduct an online expert session on "**Role**

of Data Structure in Data Science" on October 30th,



2021. This expert session covered various topics such as different types of data structures and how to apply data structure algorithms for data science. The session was organized by **Dr. P. S. Mann** (Associate Professor, GTU-GSET) and around 35 students participated in the online discussion.

(3) Dr. Shruti Kikani has been invited to deliver an expert lecture series on "Personality Development and Communication Skills" from October 29th, 2021. The sessions were designed for M.E. 1st semester CS/IOT/MCNT/BT students. The series' purpose was to improve effective communication skills while also developing a certain skill or behavior and expanding knowledge in other areas. The series is coordinated by **Prof. S.K. Hadia,** (Associate Professor, GTU-GSET) along with **Dr. P. S. Mann** (Associate Professor, GTU-GSET).

(4) Mr. Hiten Bhuta, CEO and Founder of CGS Ltd in Florida, has been invited to



present an online expert session on **"Enhance your success by using Artificial Intelligence Tools"** on December 20th, 2021 as part of the skill enhancement



program. Various AI tools for automatically writing articles, creating video. painting. music, and providing automated customer service were discussed. This expert session was attended by around 60 students. The session was coordinated by Prof. Rutika Ghariva (Assistant Professor, GTU-GSET).

(5) During National Cyber Security Awareness Month (NCSAM), on October 18th, 2021, "Cyber Safety and Security Awareness seminar" has been organized under ISEA, C-DAC Hyderabad. The major goal of conducting this session was to



make students aware of various threats and security measures. **Prof. Seema Joshi**, **Prof. Margam Suthar, Prof. Deepak Upadhyay**, and **Dr. P. S. Mann** coordinated the awareness workshop, which was attended by first and third semester M.E. Cyber Security students.

(6) The webinar was held on December 2nd, 2021, to educate postgraduate (GSET) and undergraduate (GPERI)



students on "IP protection rules and their importance." The objective is to provide guidance on submission of patent/copyright/trademark /design application to the Office of the Controller General of IPR operating under the Department of Industrial Policv and Promotion. In addition, how IP applications can be filed in other countries, was also briefly introduced along with discussion of case study of copyright obtained in Canada by the speaker. The webinar was coordinated by Prof. R. A. Thakker (Adjunct Professor, GTU-GSET).

(7) "Pre-placement talk and post-placement feedback session of NiViData Consultancy Campus Placement" was



arranged for the students of **GSET** (post graduate students) and GPERI (under graduate students) on 25th October 2021 and 18th November 2021 respectively. Total 55 students have attended this pre-placement and post-placement talk feedback session. The session was coordinated by Prof. R. A. Thakker (Adjunct Professor, GTU-GSET) and Prof. Seema Joshi (Assistant Professor, GTU-GSET).

(8) Mr. Amar Dave, Partner at Innoventix Solutions, SharePoint/Office



365 consultant, Ahmedabad, has been invited to deliver an expert session on "Microsoft 365: Its Apps usage and as a career option" on 14th December 2021. Around 35 students have attended the session. The topics discussed this session in were development and usage of Microsoft 365 Apps and Career opportunities in the domain. The session was coordinated by Prof. P.S. Mann (Associate Professor, GTU-GSET) and Prof. Seema Joshi (Assistant Professor, GTU-GSET).

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 the faculties in recognition of their academic and social achievements, during the last 3 months. Some of the distinctions include:

<u>Award/Appreciation</u> <u>received:</u>

Prof. Mridul Seth, Assistant Professor, GTU-GSET Earned a global level credly badge titled as **"Bentley Education: Distinguished Educator"**, issued by Bentley Systems. Educators have been



recognized for their ability to effectively transfer skills and knowledge so that the recipient is able to apply the skill in a specific situation or leverage the materials presented.

Faculty members as Resource Persons:

Prof. (Dr.) S. D. Panchal, Professor, GTU-GSET (1) Invited as a resource person



to deliver an expert session on "Cyber security Awareness" organized by Directorate of ICT & e-Governance & Gujarat Informatics Ltd, Department of Science and Technology, Government of Gujarat on 25th October 2021.

(2) Delivered an expert talk on "IOT Security Issues, Challenges and



Compliances" during the national level Short Term Training Program (STTP) on "Cyber challenges for Industry 4.0" from 20th December 2021 to 24th December 2021 organized by the institute under Information Security Education and Awareness (ISEA).

(3) Delivered an expert session on "**NBA Awareness**" for the faculty members of Graduate School of Pharmacy and Gujarat Power Engineering & Research Institute. **Prof. Seema Joshi, Assistant Professor, GTU-GSET** Delivered an online expert session on **"Cyber Security"** at LD



College of engineering on 25th November 2021 and 26th November 2021 under ISA Student chapter.

Prof. Mahesh Panchal, Assistant professor. GTU-**GSET**, Delivered an expert talk on "Artificial Intelligence in Drug Discoverv and Development" in GUJCOST sponsored National Webinar Indukaka organized bv Ipcowala College of Pharmacy, New VVNagar on 9th October 2021.

Prof. Gautam D. Makwana, Associate Professor, GTU-**GSET** Delivered expert lectures in the national level STTP on "Implementation of Internet of Things Applications using Machine Learning and Deep Learning" organized by GTU-GSET on 27th December, 2021 and 31st December, 2021. The topics of sessions were "Introduction



of IOT Builder Platform" and Hands on Practices



on "IOT Builder Platform"

<u>Technical & Non-Technical</u> <u>Contribution:</u>

Faculty members of GTU – GSET have participated in more than 10 technical seminars/workshops/FDPs/S TTPs. They have contributed in various technical and nontechnical activities. Some of the distinctions include:

Dr. P. S. Mann, Associate Professor, GTU-GSET (1) Established LEAD (Low-cost Engineering Application and Design), research group at GTU-GSET on 17th November 2021 under the mentorship of Prof. (Dr.) S D Panchal,



Director GTU-GSET with a mission to develop cost effective and efficient applications for diversified thrust areas and to incite the potential areas of

(2) Coordinated Research Proposal Presentation (RPP) for Computer Science candidates under AICTE doctoral Fellowship (ADF) on 25th October 2021.

Prof. S.K. Hadia, Associate Professor, GTU-GSET (1) Nominated as Assistant Nodal officer for Shreshth Bharat-Panch Prakalp Activities under Azadi ka Amrit Mahotsav for GTU on 2nd December 2021.

(2) Invited as an expert for the purchase committee at Ayush Health and wellness center, Kolawada on 10th December 2021.

(3) Nominated as a Nodal Officer for National Institutional Ranking Framework (NIRF)-2022 for GSET on 10th November 2021.

(4)Coordinated Research Proposal Presentation (RPP) for eligible candidates of mechanical engineering under AICTE Doctoral Fellowship (ADF) on 26th October 2021. **Prof. Mridul Seth, Assistant** Professor, GTU-GSET (1)Arranged technical visit to IIT Gandhinagar, Gujarat on 3rd October 2021. In discussion and consultation with Prof. Pranab Mohapatra, IIT Gandhinagar a meeting was scheduled for the technical visit to the laboratory of the Water Resource Management. the meeting various In discussions related to the real time problem faced by the end users of the infrastructure related to water resource management took place. The discussion was further followed by understanding of available equipment in the laboratory along with the for problem statements research activity.

(2)VisitedNepraResourceManagement,Gujarat on 23rdOctober 2021.



The discussion was held with Ankit Shah, partner of Nepra Resource Management Group, a social enterprise that operates in the segment of Dry Waste Management &



Recycling. Mr. Ankit Shah advised taking steps to recycle waste resources, as the organization is aiming toward a zero-waste-to-landfill goal.

(3) Visited to NeeRain Pvt Ltd on 18th December 2021. A



meeting was held with Mr. Amit Doshi founder of Neerain Pvt Ltd. The arching objective of the visit was to understand the problem of water crisis and discuss about the solutions to fight with the challenges related to it.

(4) Coordinated Research Proposal Presentation (RPP) for eligible candidates of civil engineering under AICTE Doctoral Fellowship (ADF) on 26th October 2021.

Prof. Raj Hakani, Assistant Professor, GTU-GSET Coordinated Research Proposal Presentation (RPP) for eligible candidates of Chemical Engineering under AICTE Doctoral Fellowship (ADF) on 26th October 2021.

Prof. Seema Joshi, Assistant Professor, GTU-GSET Prepared MCQs in Gujarati Language and submitted to CID (CRIME) Branch, Police Bhavan, Gandhinagar as a part of State-level Cyber Security Awareness on 12th October 2021 during National Cyber Security Awareness Month (NCSAM).

Prof. Deepak Upadhyay, Assistant Professor, GTU-GSET Development and Deployment of E-Resource



Portal for the GTU-Graduate School of Engineering and Technology. The E-Resource portal will work on the intranet in which the research papers, expert session videos and the material in the soft copy will be available for the GTU-GSET members.

EME School Officers Visit @ GSET:

Students and staff from the EME School in Vadodara visited the GTU-GSET on



November 23, 2021. Some of these students are pursuing Masters Degrees, while others are pursuing Ph.D. degrees in mechanical engineering and electronics and communication engineering. They have visited the GTU Bosch Center of Excellence in Automation, Pneumatics, Hydraulics, Sensors and PLCs, High-Performance Computer Lab, and Internet of Things Lab. The students also addressed a problem they having with their were research and got ideas to resolve their issues. Prof. Gautam Makwana, Prof. S.K. Hadia, Prof. Seema Joshi, Mr. Jeet Joshi, Ms. Grishma Jani, Ms. Zalak Navak, and Ms. Komal Praiapati gave practical demonstrations of various technologies available at GSET.

Non-technical events:

GTU-GSET has decided to celebrate the birthdays of its employees in a unique way by performing community service.

(1) In November, 2021 to share the birthday celebration, the GSET staff visited the Shree Shakti Prasthan Trust which supports the girls from the



deprived and underprivileged society by providing them



education and best upbringing. To know more about the prominent social activities performed by the trust, the staff interacted with the trustees as well as the girls residing there and appreciated the efforts put in by the Trust to being a major change in the society.

(2) December 23, On 2021, employees with birthdays within the last one month went to "VISHWA JYOTI VIKALANG KANYA NIVASI SHALA" in Motera, Ahmedabad. Employees with birthdays in December have given all of the girls educational kits and winter-special sweets. All members of the staff have interacted with the school's



students and teachers. As a part of national (3) library week celebration a Book Exhibition "Unsung Heroes of India" under theme AZADI AMRUT of KA MOHATSAV has been celebrated at GTU-GSET on 22nd November 2021. Prof Komal Borisagar and



Mr. Ranchhod Khambhala successfully coordinated the event.



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:

On November 18th, 2011, the Gujarat Technological



Inter

University College Sports Calendar was displayed. GSET's Techfest-Sports-Cultural Club has invited students from Cyber Security, IOT, MCNT, and Data Science to participate. GSET students have participated in a range of sports such as Valley ball, handball, and others. Ms. Priti Rathava (1st semester student, M.E. Cyber Security) was selected for the GTU national Valleyball team and has played for GTU at the national level.

Environment Club:



GTU GSET faculty, staff, and students have all contributed to the creation of a plastic-free campus. The event began with a pledge to reduce the use of plastic to a minimum, if possible, and to eliminate the use of plastic from everyday life. On the 4th December 2021, the event was followed by the plogging of plastic in the Academic Blocks of GTU Campus.

Cyber Security Club:

The program on "Cvber Security Awareness with **Case Study**" organized by **GTU-GSET** Cyber Security



Club in association with Gujarat Police on 16^{th} December 2021 at GTU-GSET, Chandkheda Campus. Total 35 students have attended the awareness session to get understanding about cyber security concepts. Following the session, Cvber Cell, Ahmedabad City visit was planned for M.E. C.E. (C.S.) Semester-1 Students along with CS Faculty Members on 18th December 2021. The objective to arrange this visit was to understand the Digital Incident Forensics and Response concept to solve the real time cases with hands-on demonstration with Police Officials.

Data Science Club:

On 9th December 2021, GSET Data science club organized "Python Whiz!" – a Quiz related to Python as well as "Crack the Code" - An Event on Debugging the Code has been arranged for the students of GSET on 18th December 2021.

Social Service Club:

On 7th December 2021, GTU-GSET celebrated "Armed Forces Flag Day". Under the NSS unit of GTU-GSET, the club service social has collected the fund from the students and staff members as Armed Forces Flag Day Fund (Kendriya sainik fund).

MCNT/IoT Club:

On 6th and 7th December 2021, MCNT/IOT club arranged a hands on session on Intel Galileo Board for the students





of all programs of GSET. Various Intel Galileo Board applications have been demonstrated during the session.



Student Internship:



Ms. Shilpi Tiwari, (Student, ME CE (Cyber Security), batch 2020-22) has been selected as a research intern at CID (Crime) Branch, Police Bhavan, Gandhinagar for the duration of one year.

Student Placement:



Mr. Arun Panikar, **(Student, ME CE (Cyber Security), batch 2020-22)**, selected at BlueInfy Solutions, as SOC Analyst.

Ms. Priyanka Jadav, (Student, ME CE (Cyber Security), batch 2020-22), selected at e-Infochips Solutions, as an engineer.





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:

Prof. S. D. Panchal, Director, **GTU-GSET** (1) Published а research paper entitled "Effects Technologyof **Driven Teaching-Learning Tools on Learning Domains**" the International in Conference on Hybrid, Blended e-Learning and (ICHBEL-2021), organized by Educational Technology and Management Academy & Association of Indian Universities (AIU) during 3rd December 2021 5th to December 2021.

Published (2)research paper titled "Pan-Sharpening for **Spectral Details Preservation Via** Convolutional **Sparse Coding in Non-Subsampled** Shearlet Space" in International Journal of Image and Graphics (DOI:10.1142/S0219467823 500134, Cite-Score: 1.1, SNIP: 0.938, SJR:0.19) in the month of December 2021.

(3) Published research paper titled "Comparative Analysis of Traffic Light Control Mechanism for Vehicle" Emergency in International Journal of Intelligent Systems and Applications in Engineering Iournal article (D0I: 10.18201/ijisae.2021473647,

ISSN: 2147-6799) in the month of December 2021.

Ms. Arpita Maheriya (PhD Scholar, ADF) & Prof S. D. Panchal, Director, GTU-**GSET.** Presented research paper titled "Smart Health and Cybersecurity in the Era of Artificial Intelligence" in International Conference on Information and Communication Technology for Competitive Strategies organised (ICTCS-2021) during 16th December 2021 to 18th December 2021.

Dr. P. S. Maan, Associate Professor, GTU-GSET (1) Published Book Chapter titled "Innovation in Healthcare for Improved Pneumonia Diagnosis with Gradient-Weighted Class Activation Map Visualization" in Data Science and Innovations for Intelligent Systems under Taylor & Fransics Group on 1st October 2021.

(2)Reviewedthemanuscript"ReinforcementQ-LearningEnabledEfficientProvisioning forDynamicServiceFunctionChainChaininMulti-DomainNetworks"forClusterComputing, Springer (WoS IF

1.809) during 14th October 2021 to 30th October 2021.

(3) Reviewed the manuscript "Data Collection Strategy Based on OSELM and Gray Wolf Optimization Algorithm for Heterogeneous Wireless Sensor Networks" Heliyon, Cell Press, Science Direct during 23th November 2011 to 28th November 2021.

(4) Reviewed the "A manuscript Hvbrid Intelligent Intrusion **Detection Using Domain Knowledge and Ensemble** Learning" for Multidisciplinary International Research Journal (GTU-MIRJ) during 14^{th} December 2021 to 17^{th} December 2021.

Prof. S.K. Hadia Associate Professor (1) Invited to serve as a reviewer in 2021 International Conference on Data Analytics for Business and Industry - DATA'21 (ICDABI) on 24th November 2011.

(2) Invited as a reviewerfor the InternationalMultidisciplinary Engineering



Conference (IMEC'22) organized by Sankalchand Patel College of Engineering, Visnagar on 15th December 2021.

Prof. Gautam Makwana, Associate Professor (1)Invited as a reviewer in the 2nd IEEE IAS International **Conference on Computational** Performance Evaluation (ComPE-2021) organized at Department of Biomedical Engineering, North-Eastern Hill University (NEHU) during 1st to 3rd December 2021. He has reviewed 10 research articles presented in this conference.

(2) Reviewed two research papers in Virtual International Conference on Futuristic Communication and Network Technologies (VICFCNT-2021) scheduled on December 10th and 11th 2021 at Vellore Institute of Technology, Chennai, Tamil Nadu, India.

Prof.MaheshPanchal,AssistantProfessor(1)Reviewed a manuscript forTELKOMNIKA(TelecommunicationComputingElectronics and Control) - aScopusindexedJournalon30thOctober 2021.

Prof. Raj Hakani, Assistant Professor (1) Reviewed the manuscript "DRONE BASED IMAGING SYSTEM FOR WASTE ASSESSMENT" for Multidisciplinary International Research Journal (GTU-MIRJ) on 22nd December 2021.

(2)Reviewed the manuscript "GPS RECEIVER BASED ACCIDENTAL PREVENTION **SPEED** CONTROL SYSTEM" for Multidisciplinary international Research Journal (GTU-MIRJ) on 22nd December 2021.

Komal Prof. Borisagar, Associate Professor (1)Published a Book chapter on "Modeling and Simulation of Efficient DVBsystem Т with MIMO Technique" in the book named Contemporary Advances in Science and (ISBN: 979-Technology 888521023-2) on 1st December 2021.

(2)Published a research "Performance paper on analysis of massive multiple input multiple output for high-speed railway" in International Journal of Electrical and Computer Engineering (IJECE) (Scopus indexed: Vol. 11. No. 6. December 2021, pp. 5180~5188 ISSN: 2088-8708,

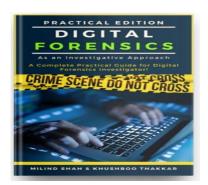
DOI: 10.11591/ijece. v11i6.pp5180-5188, June to December 2021)

(3) Published a book on **"Network Theory"** under Tech-Neo Publications, Pune (ISBN: 9390904463 978-9390904464). The Book Issue published during the phase of June to December 2021.

Mr. Milind Shah & Ms.KhushbooThakkar(Student, ME CE (CyberSecurity, Batch 2020-22))Publishedbooks on "Digital



Forensic – as on investigative approach" under code Academy publication September 2021. Hard cover as well as paper back and kindle edition of the book is available on Flipcart and amazon.

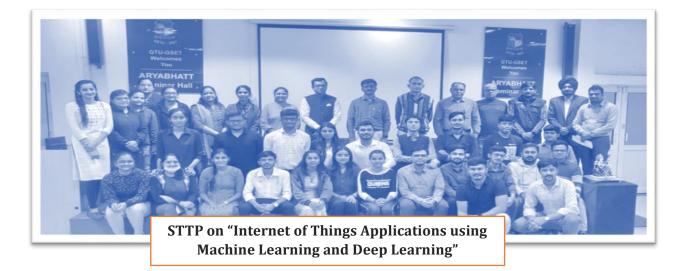


NEW ARRIVALS

LIBRARY NEW ARRIVALS:







CREATIVE CORNER

Professor's Blog:

<u>ધડપણ</u> Ms. Komal Prajapati, Lab Assistant, GTU-GSET જીવનનો એક એવો તબક્કો, કે જે દરેક તબક્કાથી કંઇક અલગ... અનુભવોથી ભરપુર એવો, પણ હોય એ બાળપણ જેવો... થોડો જીદ્દી સ્વભાવ અને સાથે બાળક જેવું વર્તન, બસ એવી જ કંઇક જરૂર હૂંફ અને પ્રેમની, કે જેવી એક બાળકને...

જરૂર એને એવા એક વ્યક્તિની, જે એને સમજે અને સાથ આપે… જેમ બાળક ને આંગળી પકડી ચલાવે, એમ એને પણ બસ એવી જ એક આંગળીની જરૂર… એની પાસે બેસે, એની વાતો સાંભળે, ઝંખના રાખે એ એવા વ્યક્તિના સાથની… દુઃખ તો એને પણ થાય, જયારે જરૂર એને એક સહારાની… પણ ઘડપણ તો છે એ તબક્કો, જે દરેક ના જીવનનો છે છેલ્લો તબક્કો…

https://gujjurocks.in/ghadpan-kone-moklyu/

<u>એકાગ્રતા અને ધ્યેય</u>

Prof. Mahesh H. Panchal

Asst. Professor, GTU-GSET

મહાભારતમાં દ્રૌપદીના સ્વયંવરમાં અર્જુને કરેલ મત્સ્યવેધ વિશે આપણને બધાને ખબર છે. આપણે અર્જુનની એકાગ્રતાની ખૂબ પ્રશંસા કરીએ છીએ અને તેમાંથી બોધપાઠ લેવાની વાત પણ કરીએ છીએ. મને પોતાને લાગે છે કે આ ઘટનામાં અર્જુનની એકાગ્રતા ઉપરાંત બીજું પણ એક પરિબળ કામ કરે છે અને એ છે તેનો એક ચોક્કસ ધ્યેય.



અર્જુનનું મન શુદ્ધ છે, એના વિચારો સ્પષ્ટ છે, એનો ધ્વેય યોક્કસ છે, એના વિચારો, વાણી અને વર્તનમાં એકરૂપતા છે. જેનો ધ્વેય યોક્કસ હોય એ પોતાના મગજ અને મન ઉપર જલ્દી અંકુશ મેળવી શકે છે. વિપરીત પરિસ્થિતિમાં તે વ્યક્તિ જેટલા શક્ય હોય તેટલા દરેક પાસાંઓનો ખૂબ ઝડપથી અભ્યાસ કરીને એક સચોટ નિર્ણય કરી શકે છે અને મોટા ભાગના આવા કિસ્સાઓમાં તે નિર્ણય સાચો પૂરવાર થાય છે.

જે વ્યક્તિનો કોઈ ધ્યેય ના હ્રોય તથા વિચારો, વાણી, વર્તન વચ્ચે એકરૂપતા ના હ્રોય અને મન અશુદ્ધ (મિશ્રિત) હ્રોય તે લોકો ભલે કદાચ ક્ષણિક એકાગ્રતા મેળવી શકે પરંતુ એ એકાગ્રતાનો ફાયદો નથી લઈ શકતા. પરિણામે વિપરીત પરિસ્થિતિમાં જ્યારે નિર્ણય લેવાનો થાય ત્યારે તેમનામાં આત્મવિશ્વાસનો અભાવ જોવા મળે છે અને પરાધીન બનતા જાય છે.

વિદ્યાર્થીઓ માટે શિક્ષણ મેળવવું એ એક સાધના છે. આ સાધના દરમિયાન એક ચોક્કસ ધ્યેય હ્રેય એ અનિવાર્થ છે. ધ્યેય એ કોઈ કોપી પેસ્ટ કરવાની વસ્તુ નથી. ધ્યેય અંતઃસ્કૂરિત હ્રોવો જોઈએ અને પોતાની શક્તિઓ, મર્યાદાઓ, પોતાના વિચારો, પોતાની પ્રકૃતિ વગેરે ધ્વારા નિર્ધારિત થવો જોઇએ. એક વખત અંતઃસ્કૂર્ણાથી ધ્યેય પકડાઈ જાય પછી તો જાણે જીવનની ગાડી ઓટોગિયરમાં ચાલવા માંડે છે અને એવું લાગે કે જાણે કુદરત પણ દરેક કાર્થમાં સાથ આપે છે.



https://www.jentilal.com/meditating-oil/

અર્જુનનો ધ્યેય હતો કે તીરંદાજીમાં તેનાથી બની શકે તેટલો બેસ્ટ પ્રયત્ન કરવો, ભલે પછી એ મત્સ્યવેધ હોય કે યુદ્ધ. અને એટલા માટે જ તે એકાગ્રતા મેળવીને પોતાના ઉપર અંકુશ મેળવી શકતો હતો.

મન ચંચળ છે એ વાત સો ટકા સાચી પણ તેને અભ્યાસથી અંકુશમાં રાખી શકાય એ પણ એટલું જ સત્ય છે.



GTU-GSET IN MEDIA





જીટાયુ જીસટ દ્વારા ઇન્ટરનટ આફ થાગ્સ વિષય પર શોર્ટટર્મ ટ્રેનિંગ પ્રોગ્રામ યોજાયો

પાત્ર છે. આ પ્રસંગ

રાણપુરા ,ઈન્ડિયન એગ્નીબિઝનેસ

સિસ્ટમના સીઈઓ શ્રી દિપક પરીખ

, જીટીયુના કુલસચિવ ડૉ. કે. એન.

ખેર , જીટીયુ-જીસેટ સંલગ્ન પ્રો. ડૉ.

આર. એ ઠક્કર અને જીટીયુ જીસેટના

ડાયરેક્ટર પ્રો. ડૉ. એસ. ડી. પંચાલ

ઉપસ્થિત રહ્યા હતાં. દેશના વિવિધ

રાજ્યોના ૫૦ થી વધુ વિદ્યાર્થીઓ

અને ફેકલ્ટીઝ ૫ દિવસીય ટ્રેનિંગ

પ્રોગ્રામમાં જોડાયાં હતાં. આ પ્રસંગે

શ્રી દિપક પરીખે જણાવ્યું હતું કે,

ભારત જેવા કૃષીપ્રધાન દેશમાં

ડિજીટાઈઝેશન કપીના વિકાસ માટે

મેનેજર શ્રી નિલેખ

ારીબળ છે

મશીન અને ડિપ લર્નિંગના ઉપયોગથી

કૃષી ક્ષેત્રે આમૂલ પરિવર્તન લાવી

શકાશે. વિશેષમાં કૃષીક્ષેત્રે પાકની

લણળી , સીઝન આધારીત ખેતી ,

જમીનની ગુણવત્તા તેમજ પાકમાં

જોવા મળતાં વિવિધ પ્રકારના રોગ

વગેરે બાબતેની સચોટ અને

આઈઓટીના વપરાશ થકી કેવી રીતે

મેળવવી જેવી વિવિધ બાબતે વિસ્તૃત

ચર્ચા કરી હતી. ૫ દિવસીય ટ્રેનિંગ

પ્રોગ્રામમાં ડિજીટાઈઝેશન ઑફ

મેન્યુફેક્ચરીંગ, મશીન અને ડિપ લર્નિગ તથા આર્ટીફિશિયલ

ઈન્ટેલિજન્સનો કૃષી ક્ષેત્રે ઉપયોગ

જેવા વિવિધ વિષય પર તજશો દારા

ટ્રેનિંગ આપવામાં આવી હતી. ટ્રેનિંગ

દરમિયાન ઈન્ડસ્ટ્રીઝ વિઝટ પણ કરાવવામાં આવી હતી. ટેનિંગ

પ્રોગ્રામના સફળ આયોજન બદલ જીટીયુના કુલપતિશ્રી અને કુલસચિવશ્રીએ પ્રો.દિપક ઉપાધ્યાય,

અને પ્રો. ડૉ. ગૌત્તમ મકવાણાને અભિનંદન પાઠવ્યા હતાં.

બાલ કારી

સમયાનુસાર

અભિનંદન

ข้องงาเ

અમદાવાદ,વર્તમાન સમયમાં ટેકનોલોજી દરેક જનસામાન્યની જરૂરીયાત છે. ડિજીટ લાઈઝેશનના આ સમયમાં ઈન્ટરનેટ ઓફ થીગ્સની ઉપયોગીતા અને તેનું મહત્વ વિશેષ જોવા મળે છે. જેના અનુસંધાને તાજેતરમાં ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી (જીટીય) સંચાલિત ગ્રેજ્યુએટ સ્કૂલ ઑફ એન્જિનિયરીંગ એન્ડ ટેકનોલોજી (જીસેટ) દારા " ઈમ્પ્લિમેન્ટેશન ઑફ ઈન્ટરનેટ ઑફ થીંગ્સ એપ્લિકેશન યુઝીંગ મશીન એન્ડ ડિપ લર્નિંગ" વિષય પર પ દિવસીય શોર્ટ-ટર્મ ટ્રેનિંગ પ્રોગ્રામનું આયોજન કરવામાં આવ્યું હતું. જીટીયુના કુલપતિ પ્રો. ડૉ. નવીન શેઠ અધ્યક્ષ ુ સ્થાને હાજર રહીને કાર્યક્રમનો શુભારંભ કરાવતાં જણાવ્યું હતું કે, જીટીયુ- જીસેટ દ્વારા સમયાંતરે આઈઓટીના વિવિધ વિષયો પર જાગાદના કેળવવા માટે અનેક પ્રકારના સેમિનાર અને ટ્રેનિંગ પ્રોગ્રામનું આયોજન કરવામાં આવે છે. જે

નર્મદા જિલ્લામાં તા.3 જી જાન્યુઆરીથી ૧૫ થી ૧૮ વર્ષની વયજૂથના ૨७,૬૩૨ ભાળકો માટે કોવિડ-૧૯ વેકસીનેશનની હાથ ધરાનારી કામગીરી



STTP on application of IOT using ML and DL

ઇન્ડરટ્રી 4.0 નામનો ખાસ ટ્રેનિંગ પ્રોગ્રામ જીટીયુરમે સાઇબર સિક્યોરિટી પર 5 દિવસનો પ્રોગ્રામ શરૂ કર્યો

અમદાવાદ | સાઇબર સિક્યોરિટીના મહત્ત્વને સમજી જીટીયુ સંચાલિત ગ્રેજ્યુએટ સ્કૂલ ઓફ એન્જિનિયરીંગ એન્ડ ટેકનોલોજી (જીસેટ) દ્વારા "સાઇબર ચેલેન્જીસ ફોર ઈન્ડસ્ટ્રીઝ 4.0" વિષય પર 5 દિવસીય શોર્ટટર્મ ટ્રેનિંગ પ્રોગ્રામ શરૂ કરવામાં આવ્યો છે. આ પ્રસંગે યતિન્દ્ર શર્માએ જણાવ્યું હતું કે, ઈન્ડસ્ટ્રીઝ 4.0ની અઘતન ટેક્નોલોજી અને મશીન લર્નિંગ, ઈન્ટરનેટ ઓફ થીંગ્સ, આર્ટીફિશિયલ ઈન્ટિલિજન્સ, ડેટા સાયન્સ અને ક્લાઉડ કૉપ્યુટિંગ જેવા ટૂલ્સથી ઔદ્યોગિક ક્ષેત્રે આમૂલ પરિવર્તન આવશે. વિશેષમાં સાઇબર સુરક્ષા અંગે જાગૃતિ કેળવાય તે અર્થે વિસ્તૃત ચર્ચા કરી હતી. 5 દિવસીય ટ્રેનિંગ પ્રોગ્રામમાં આઈટી સિક્યોરીટી ઈન ઈન્ડસ્ટ્રીઝ, આઈઓટી પ્રોટોકોલ, એન્ડ્રોઈડ મોબાઈલ સિક્યોરિટી વિષય પર ટ્રેનિંગ આપવામાં આવશે.

STTP on Cyber challenges in Industry 4.0





About GTU-GSET Vision and Mission:

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

Program Outcomes:

- An ability to independently carry out research /investigation and development work to solve practical problems.
- An ability to write the present substantial technical report/documents.
- Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

Program Specific Outcomes:

M.E. – Computer Engineering (Cyber Security):

- To understand and analyze the various cyber-attacks, cyber laws, ethical hacking concepts, defending practice of cyber security, and digital forensics techniques.
- Identify, analyze and develop software and hardware solutions for complex problems in cyber security domain.
- Apply advanced knowledge to identify research challenges, and contribute individually or in team to resolve Cyber Security and Digital Forensics issues.

ME-EC (Mobile Communication and Network Technology):

- Understand, design and implement emerging technology in the field of mobile communication and network technology.
- To analyze real time problems, design appropriate system to provide solutions which are technically sound, cost effective and beneficial to the society in mobile communication and network technology.
- To furnish with necessary soft skills, managerial skill, analytical skills to work in the software and hardware industry

M.E. – Computer Engineering (Internet of Things):

- To understand various aspects of Internet of Things, embedded systems, sensors, actuators, various algorithm of machine learning, artificial intelligence and protocols.
- To implement various methods, techniques, algorithms of deep learning, real-time data analysis, cloud computing, wired & wireless technologies, and programming/script languages in the field of IoT.
- Identify, analyse and develop various algorithm, techniques in software and hardware solutions for complex and realtime problems in the field of IoT.
- Apply advanced knowledge to identify research challenges, and contribute individually or in team to resolve new solutions/products/methods in the field of IoT.

About PG Diploma in Data Science

By use of various web-based and mobile-based applications, volume in our data is generated. Hence, it becomes challenging task to handle these data and most importantly to understand the data. Looking at the current and futuristic trends, there will be demand of data science experts who can understand the nature of data, analyse the data and take result-oriented decisions analysis of the data. This program is for students who are interested and developing skills in data science and data analytics. This is one year course with 30 intake. During one year of program the students will learn in sights of subjects like Machine Learning, Programming in Python, Blockchain Technology, Big Data Analytics, and Data Analyse is using Cloud Computing etc.

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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Programs @ 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

GUJARAT TECHNOLOGICAL UNIVERSITY GRADUATE SCHOOL OF ENGINEERING AND TECHNOLOGY (University Managed PG Engineering College)

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