

REFLECTIONS



MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

ISSUE :- JUL 2021 - DEC 2021



This AICTE approved Institute under GGSIP University is ideally located in the Institutional area of Janakpuri, New Delhi. It has a campus spread over eight acres of land with beautiful eco-friendly surroundings. Institute was earlier operating from four storey building of 6279 sq.m of built up area. Recently it has been shifted to a more

spacious even more storeyed building with built up area of 9660 sq.m The institute has over a short span of time acquired and developed impressive infrastructure , expertise and resources for imparting high quality engineering education. The institute offers B.Tech courses in CSE, ECE, IT and EEE with total intake of 660 students.



Col (Dr.) Ranjit Singh
Director



Prof. A. K. Singh
Deputy Director



Prof. H.S. Rawat
Director T&P



VISION

To become one of the most admired centers of academic excellence in the field of Engineering & Technology for all-round professional development of students to enable them to meet the growing technological needs of the country.

MISSION

Developing new paradigm in imparting education in the fields of Engineering and Technology and to imbibe national values leading to student's empowerment, with a view to prepare them to meet the national and global challenges.

MSIT Strengths

- NAAC 'A' and NBA (CSE, IT, ECE & EEE) Accredited
- ISO 9001: 2015 Certified
- Ranked in 251-300 Band in National Institutional Ranking Framework (NIRF) by Ministry of HRD in 2020
- "Engineering Education excellence award 2021" by the Institute of Engineers (India).
- 3rd Rank in Top 25 Private Engineering colleges 17th Rank in overall Top 200 best Engineering College by India Today
- Experienced, dedicated and highly qualified faculty members
- Dr. Yogendra Arya and Dr. Prabhjot Kaur, faculties at MSIT, ranked in Top 2% Researchers in the World by Stanford University Global Ranking for the year 2020 and 2021 respectively

Courses Offered

| | |
|--------------|-----|
| B.Tech (CSE) | 240 |
| B.Tech (ECE) | 180 |
| B.Tech (IT) | 180 |
| B.Tech (EEE) | 60 |

EDUCATIONAL PROFILE OF FACULTY

| Quality of Faculty | Number |
|------------------------|--------|
| Faculty with Ph.D. | 65 |
| Faculty pursuing Ph.D. | 58 |
| Thesis Submitted | 01 |

| Faculty Details | Number |
|---------------------|--------|
| Professor | 06 |
| Associate Professor | 27 |
| Reader | 01 |
| Assistant Professor | 101 |

MSIT Amenities & Learning Support

Good internet facility with Wifi

Well-stocked library with good number of national and international journals.

Air-conditioned seminar Halls, fully equipped with state-of-art audio-visual devices.

Hostel Facility for 240 students.

Eco- friendly and amicable working atmosphere, good infrastructure, Air-conditioned and Well maintained state of art laboratories.

MSIT ResearchCell

Publications

| | |
|--------------------|----|
| SCI/SCIE/ESCI | 71 |
| Scopus | 20 |
| Conferences | 34 |
| Books/Book Chapter | 12 |

Patents

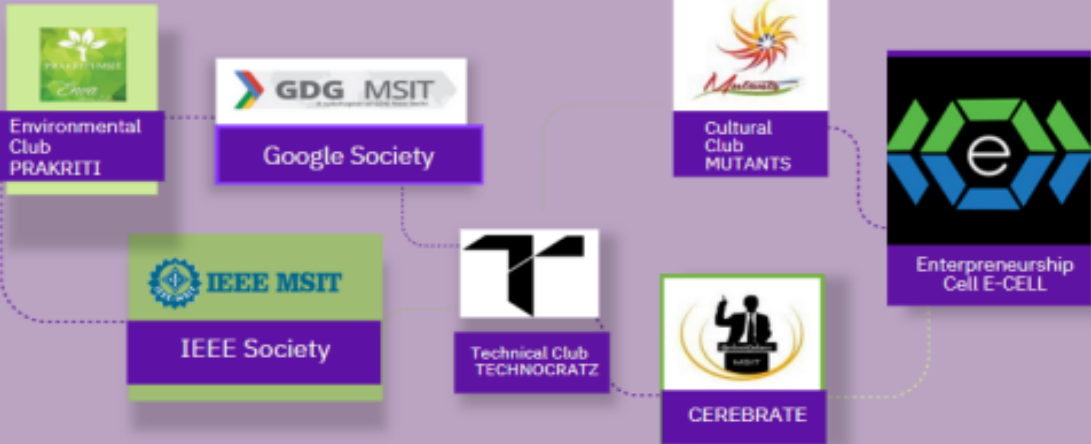
| | |
|-----------|----|
| Published | 28 |
| Granted | 02 |

Projects

DST Project "Automatic Pain Intensity Detection by Analyzing the Facial Expressions Caused Due to Pain" - 4.52 lakh

DST-SERB project under TARE scheme on "Physico-chemical Investigations of the binding interactions of NHE inhibitors (Rimeporide, Amiloride and Cariporide) with APOE3/APOE4 isoforms of human APOE gene" - 18.30 Lakh

Societies @ MSIT



PROFESSIONAL BODIES@MSIT

EBSB

Conducted a series of Webinars for our part-nered Institute (Centre for Computers and Com-munication Technology (CCCT), Sikkim) to promote the spirit of Ek Bharat Shreshta ..Bharat

IIC

An initiative by Ministry of Human Resource Develop-ment, Govt. of India, established to foster the culture of innovation amongst all Higher Engineering Institutions (HEIs) and inspire young students to work with new ideas.

UBA

Adopted 5 villages under this scheme. UBA Cell MSIT has been committed to solve the problems faced by the residents of five villages adopted by MSIT by suggesting innovative solutions.

E-YATRA

Established in collaboration of the project hosted in the Department of CSE, IIT Bombay, to spread Embedded systems and Robotics education in Engineering

Placement @ MSIT

Major companies visited for recruitment -

Amazon Microsoft ZS ION Adobe Infosys Cognizent JoshTech ATLAS copco

Highest Packages offered in 2021

- Amazon 55 LPA
Microsoft 42 LPA
DeShaw, Sharechat, Cred 35 LPA
PayPal 24 LPA
Goldmansachs 23 LPA

2022 Batch

Job Heads 507
Job Offers 1144

2021 Batch

Job Heads 353
Job Offers 739

University Gold Medalists @ MSIT

No. of Toppers till 2020 20

No. of Toppers in last 2 years 3 (CS, IT, EEE)

TECHNICAL PAPER PUBLISHED

CSE

JULY 2021
TO
DEC 2021

- 1) Koyel Datta Gupta, Aarti Goel¹, Deepak Kumar Sharma¹, "LEOBAT: Lightweight encryption and OTP based authentication technique for securing IoT networks" Expert Systems ISBN: ISSN 1468-0394 1370-4621 July 21, 2021.
- 2) Vimal Gaur, Rajneesh Kumar," Analysis of Machine Learning Classifiers for Early Detection of DDoS Attacks on IoT Devices ", Arabian Journal for Science and Engineering on 8 July 2021, ISBN: ISSN : 2191-4281.
- 3) Vikrant Shokeen, Jaskirat Singh, Prabhjot Kaur, Puneet Kumar Aggarwal, "Dwelling Price Prediction Based on Physical, Economical & Social Indicators Using Regression Methods", DE, pp. 2437-2479, Oct. 2021.
- 4) K. D. Gupta, R. Nigam, D. K. Sharma and S. K. Dhurandher, "LSTM based Energy-Efficient Wireless Communication with Reconfigurable Intelligent Surfaces," in IEEE Transactions on Green Communications and Networking, doi: 10.1109/TGCN.2021.3135437.
- 5) Vikrant Shokeen, Sachin Goel, Nidhi Gupta, Chhaya Sharma, Parita Jain, "Blockchain Technology and Its Industrial Utilization: A Review", DE, pp. 14570-14579, Sep. 2021.
- 6) S. Malik and P. Bansal, "Multimodal semantic analysis with regularized semantic autoencoder," J. Intell. Fuzzy Syst., vol. 42, no. 2, pp. 909–917, 2022.
- 7) S. Dhingra and P. Bansal, "Designing of a rigorous image retrieval system with amalgamation of artificial intelligent techniques and relevance feedback," J. Intell. Fuzzy Syst., vol. 42, no. 2, pp. 1115–1126, 2022.
- 8) D. Deshwal, P. Sangwan, and N. Dahiya, "How will COVID-19 impact renewable energy in India? Exploring challenges, lessons and emerging opportunities," Energy Res. Soc. Sci., vol. 77, no. 102097, p. 102097, 2021.
- 9) N. Sangwan and V. Bhatnagar, "Video Popularity Prediction using Stacked biLSTM Layers," Malaysian Journal of Computer Science, vol. 34, no. 3, pp. 242-254, 2021.
- 10) Singh, S., Jatana, N., & Goel, V. (2021). HELF (Haptic Encoded Language Framework): a digital script for deaf-blind and visually impaired. Universal Access in the Information Society, 1-11.
- 11) Singhal, S., Jatana, N., Suri, B., Misra, S., & Fernandez-Sanz, L. (2021). Systematic Literature Review on Test Case Selection and Prioritization: A Tertiary Study. Applied Sciences, 11(24), 12121.
- 12) T.Sachdeva, B.Sharma,G.beniwal," CCTV Footage Summarization," International Journal of New Innovations in Engineering and Technology, vol.17, pp.-1-11, July2021.
- 13) S.Khanum, G.Beniwal, "Distributed and Serverless Peer-to-Peer Chat application on IPFS," International Journal of Innovations in Engineering and Technology (IJJET), Vol.21, pp.1-6, Oct 2021
- 14) G.Beniwal, A.Singhrova, " A systematic literature review on IoT gateways,"Journal of King Saud University - Computer and Information Sciences., pp. 1-23, Nov 2021
- 15) P Dhankhar, "Speech Separation using bi-LSTM network", International Journal of scientific research in Engineering and management,pp. 1-5,D. 2021

- 1) K. Upadhyay, P. Kaur, and SVAV. Prasad, "State of the Art on Data level methods to address Class Imbalance Problem in Binary Classification," GIS Science Journal, vol. 8, no. 3, pp. 875–903.
- 2) S. Malik, S. Jain, " F-ONTOCOM: A Fuzzified Cost Estimation Approach for Ontology Engineering", Journal of Web Engineering, River Publisher, 2021
- 3) P. Rathee, S. K. Malik, "Ontology Concept semantic similarity matching based on Ant Colony Optimization algorithm", Journal of Information and Optimization Sciences, Taylor & Francis, December 2022.
- 4) Dr. P. Manojkumar, M. Suresh, Alim Al Ayub Ahmed, Dr. Hitesh Panchal, Dr. C. Christopher Asir Rajan, Dr. A. Dheepanchakkravathy, Dr. A. Geetha, Dr. B. Gunapriya, Dr. Suman Mann & Dr. Kishor Kumar Sadasivuni, " A novel home automation distributed server management system using Internet of Things", International Journal of Ambient Energy, ESCI & scopus indexed, July 2021, ISSN: 0143-0750 DOI:
- 5) Attia, M. E. H., Kaliyaperumal, S., Thangamuthu, G., Ilango Rengaraju, Suman Mann, Santhakumar Jayakumar, Suma Christal Mary Sundararajan, "Impact of water depth on thermal efficiency, exergy efficiency, and exergy losses of finned acrylic solar still: an experimental study, Environmental Science and Pollution Research (2021).
- 6) S. Juneja, M. Gahlan, G. Dhiman, " Futuristic Cyber-Twin Architecture for 6G Technology to support of everything"-Hindawi, ID 9101782 |
- 7) T. Sachdeva, Bharti Sharma, and Gunjan, "CCTV Footage Summarization", International Journal of New Innovations in Engineering and Technology, vol-17, issue-2, pages: 1-11 ISSN- : 2319-6319 July, 2021.
- 8) Sharma, Bharti, et al. "Benchmarking geospatial database on Kubernetes cluster. " EURASIP Journal on Advances in Signal Processing 2021.1 (2021): 1-29.
- 9) Seema Bawa, Sitender. A sanskrit-to-english machine translation using hybridization of direct and rule-based approach. Neural Computing and Applications, volume 33, pages 2819–2838. Springer, 2021, (Impact Factor: 5.606). 2021 [SCI]
- 10) Sitender, Munish Kumar, Seema Bawa and Sangeeta. A comprehensive survey on machine translation for english, hindi and sanskrit languages. Journal of Ambient Intelligence and Humanized Computing, pages 1–34. Springer, 2021, (Impact Factor: 7.10). 2021 [SCI]
- 11) Sitender and Sangeeta. Operating machines using facial expressions. Design Engineering, pages 714–722, 2021.
- 12) Sitender and Sangeeta. Analyzing twitter data on covid-19 vaccines. Design Engineering, pages 653–663, 2021.
- 13) Sitender and Seema Bawa. Sansunl: a sanskrit to unl converter system. IETE Journal of Research, volume 67, pages 117–128. Taylor & Francis, 2021, (Impact Factor: 2.33). 2021 [SCI]
- 14) Sitender, Sangeeta, Kapil Sharma and Manju Bala. New failure rate model for iterative software development life cycle process. Automated Software Engineering, volume 28, pages 1–22. Springer, 2021, (Impact Factor: 2.88) [SCI]
- 15) Tripti Rathee and P. Singh, A systematic literature mapping on secure identity management using blockchain technology, Journal of King Saud University – Computer and Information Sciences, <https://doi.org/10.1016/j.jksuci.2021.03.005> [SCIE Journal, IF13]
- 16) Tripti Rathee and Singh, P. Secure data sharing using Merkle hash digest based blockchain identity management. Peer-to-Peer Netw. Appl. (2021). <https://doi.org/10.1007/s12083-021-01212-4> [SCIE JOURNAL, IF 3.4]

17) M. Tomer and M. Kumar, "Multi-document extractive text summarization based on firefly algorithm," J. King Saud Univ. - Computer. Inf. Sci., 2021.

18) Khanum S, Beniwal G "Distributed and Serverless Peer-to-Peer Chat application on IPFS", International Journal of Innovations in Engineering and Technology (IJJET), Vol 20 issue 3, 2021, issn:2319-1058.

Manoj Malik, Hiteh Batra, Sahil Wasan, "Improved round robin algorithm under cloud computing", International Journal of Scientific Research in Engineering and Management, Vol.5, Issue-7, July 2021.



1) Deepti Deshwal, Pardeep Sangwan, and Naveen Dahiya. "How will COVID-19 impact renewable energy in India? Exploring challenges, lessons and emerging opportunities." Energy Research & Social Science 77 (2021): 102097.

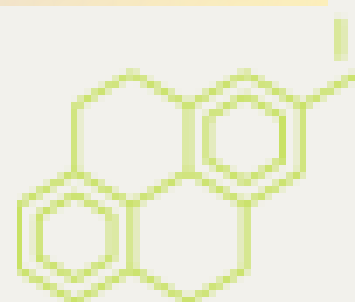
2) Naveen Dahiya, and Pardeep Sangwan. "An Intelligent Ranking Model for Multi-Criteria Decision Making Using Fuzzy Matrix Method." Recent Advances in Computer Science and Communications (Formerly: Recent Patents on Computer Science) 14, no. 5 (2021): 1448-1460.

3) Upma Singh, Mohammad Rizwan, Muhannad Alaraj, and Ibrahim Alsaïdan. "A Machine Learning-Based Gradient Boosting Regression Approach for Wind Power Production Forecasting: A Step towards Smart Grid Environments." Energies 14, no. 16 (2021): 5196.

4) Neetu Sehrawat, Binod Kumar Kanaujia, Anshul Agarwal, and Gaurav Varshney. "Analysis of an Inhomogeneous Circularly Polarized Hollow Dielectric Resonator Antenna Using Perturbation Theory." Electronics 10, no. 18 (2021): 2273.

5) Neelam Barak, Vineeta Kumari, and Gyanendra Sheoran. "Design and Development of an Automated Dual-Mode Microscopic System Using Electrically Tunable Lenses." Microscopy and Microanalysis 28, no. 1 (2022): 173-184.

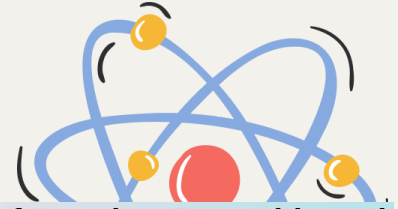
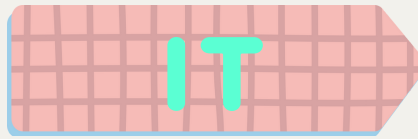
**PAPER PRESENTED IN
NATIONAL/INTERNATIONAL
SEMINARS/CONFERENCES**



1) V. Gaur and R. Kumar. " Hybrid Classification Technique for detection of DDoS attacks" in 5th International Conference on Information Systems and Computer Networks".

2) S. Kumar, J. Verghese and R. Dutta, "BERLin: Bidirectional Encoder Representations from Linformer", in International Conference on Innovations, Research and Challenges in Emerging Technologies (IRCET-2021), PIET-Panipat, 2021.

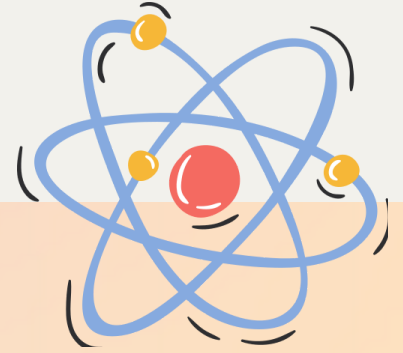
3) V.Gaur, R. Dwivedi, Shivam, Pankhuri, " Conversion of Sign Language into Devanagri Text using CNN" in Janardan Rai Nagar Rajasthan Vidyapeeth, Udaipur, Rajasthan, Oct 2021.



- 1) Suyash Kumar, Prabhjot Kaur, Anjana Gosain, “Comparative Study of Bagging Ensemble and ARIMA model for prediction of Covid-19 in India”,GCAIA2021, 8-10 September, 2021, Tayler and Francis, CRC press.
- 2) Prabhjot Kaur, Poonam Sharma, Kamaljit Singh,” Secure Protocols for Biomedical Smart Devices”, Cybersecurity: Ambient Technologies, IoT, and Industry Implications, Tayler and Francis, CRC Press,2021.
- 3) Suyash Kumar, Prabhjot Kaur, Anjana Gosain (2022), "A Comprehensive Survey on Ensemble Method", IEEE 2022 7th International Conference for Convergence in Technology (I2CT),Pune, Maharashtra, India. Indexed in IEEEExplore.
- 4) Sonika Malik, Sarika Jain,“Semantic Ontology-Based Approach to Enhance Text Classification”, ISIC’21: “International Semantic Intelligence Conference, CEUR Workshop Proceedings.
- 5) D. Gupta, S. K. Jha and Suman Mann, “Internet Crimes-It's Analysis and Prevention Approaches”, 2021 9th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), IEEE.
- 6) J. Arora, V. Sharan, Yogita “A study on Voice-bot technology and its impact on human welfare”, International Conference on Advances in Management Practices, ICAMP, 2021.
- 7) Tripti Rathee and Parvinder Singh, A Self -Sovereign Identity Management System using Blockchain in In Cyber Security and Digital Forensics: Proceedings of ICCSDF 2021, July 2021, pp.351-371.



- 1) Pooja Singh, Vinay T. R., Archana Balyan, Gangadhara, Sandeep Prabhu M., “P-V and I-V Characteristics of Solar Cell” Design Engineering, 520 – 528, 2021
- 2)Dankan Gowda V., Mohammad Taj, Pramod M. S., Archana Balyan, Thangadurai N. (2021). “Adaptive Algorithm for High-Speed Integrated Filters”. Design Engineering, 1388 – 1395, 2021
- 3) Parul Chaudhary and Puneet Azad, “Energy harvesting from human biomechanical energy for health monitoring devices,” IETE Journal of Research (Taylor & Francis), vol.67, pp. 74-81, 2021
- 4) Sudesh Pahal, Neeru Rathee & Brahmjit Singh (2021) “A Deep Learning-Based Model for Link Quality Estimation in Vehicular Networks, IETE Journal of Research”
- 5) Kadian Poonam, Arora Shaifali M. , N. Robust “Digital Watermarking Techniques for Copyright Protection of Digital Data: A Survey”. Wireless Pers Commun 118, 3225–3249 (2021).
- 6) Gupta, Richa, Gaurav Varshney, and R. S. Yaduvanshi. "Tunable terahertz circularly polarized dielectric resonator antenna." Optik 239 (2021): 166800.
- 7) Pahal, S., Rathee, N. “Evaluating Uncertainty of Measurement While Predicting Location in Smart Vehicles”. MAPAN 36, 377–388 (2021).
- 8) N. Rathee, S. Pahal , D. Sheoran, “Evaluating the Uncertainty of Classification Due to Image Resizing Techniques for Satellite Image Classification”, MAPAN., pp.1-9, 2021
- 9) Deshwal, D., Sangwan, P. and Dahiya, N., 2021. “How will COVID-19 impact renewable energy in India? Exploring challenges, lessons and emerging opportunities”. Energy Research & Social Science, 77, p.102097.



- 10) Dahiya, Aman, Anand, Rohit, Sindhwani, Nidhi et al. "Design and Construction of a Low Loss Substrate Integrated Waveguide (SIW) for S Band and C Band Applications". MAPAN (2021).
- 11) Gupta Richa, Ankit Gaur, Sandeep Gupta, and Garima Bakshi. "Circularly Polarized Multiple Layer Dielectric Resonator Antennas." Progress In Electromagnetics Research C 112 (2021)
- 12) Gupta, R., Yadav, D., Rao, M. "Design and Testing of SMPS in Accordance with IEC 61000-4-11 Standard with Measurement Uncertainty". MAPAN (2021).
- 13) Rajput, S., Bhatia, K.S. "Self organizing distributed mobility management for next generation mobility protocol. J Ambient Intell Human Comput" (2021).
- 14) Rajput, S., Bhatia, K.S. "Self organizing distributed mobility management for next generation mobility protocol". J Ambient Intell Human Comput (2021).
- 15) Sangwan, Pardeep, Deepti Deshwal, and Naveen Dahiya. "Performance of a language identification system using hybrid features and ANN learning algorithms." Applied Acoustics 175 (2021): 107815.
- 16) Sharma, Geetanjali, Abhishek Parashar, and Amit M. Joshi. "DepHNN: A novel hybrid neural network for electroencephalogram (EEG)-based screening of depression." Biomedical Signal Processing and Control 66 (2021): 102393.
- 17) Mr. Ravi Choudhary presented paper "Optimization of Controller Parameters in Multi-Area Power System using ALO Algorithm" in National Conference on Recent Trends in Electronics and Electrical Engineering, 29-30 Oct. 2021.
- 18) Dr. Pardeep Sangwan presented paper "Predicting Standings in F1 Sports Driver's Championship using Lasso Penalised Regression" in 2021 International Conference on Industrial Electronics Research and Applications (ICIERA), 22-24 Dec 2021.
- 19) Dr. Pardeep Sangwan presented paper " Speaker Identification System Using CNN Approach" in 2021 International Conference on Industrial Electronics Research and Applications (ICIERA), 22-24 Dec 2021.
- 20) Ms. Neetu presented paper " Speaker Identification System Using CNN Approach" in 2021 International Conference on Industrial Electronics Research and Applications (ICIERA), 22-24 Dec 2021.
- 21) Ms. Suma Lata presented paper "Low Frequency Control in Multiarea power system using TID control schemes" in International Conference on Cyber Technologies & Emerging Sciences.



BOOKS/BOOK CHAPTER PUBLISHED:



CSE

- 1) K. Datta Gupta, Channel Allocation in Wireless Networks :Beginner's Guide, Republic of Moldova, Lambert Academic Publishing, 2021.
- 2) K.Datta Gupta, R. Dwivedi , Green Computing at a Glance- Solution for Next Generation in Green Computing in Network Security: Energy Efficient Solutions for Business and Home. ed., USA, Taylor ans Francis 2021.
- 3) Pooja Kherwa, Sonali Singh, Saheel Ahmed, Pranay Berry and Sahil Khurana, "Articulated Human Pose Estimation Using Greedy Approach," Machine Learning, Intec-Open. 978-1-83969-485-1, Sept 2021
- 4) Sangwan, N., & Bhatnagar, V. (2021). Optimized Text Classification Using Deep Learning. In Advances in Information Communication Technology and Computing (pp. 293-302). Springer, Singapore.
- 5) D. Wadhwa, N. K. Singh, and N. Jatana, "Evaluation of Bernstein Polynomial as a Machine Learning technique," IOP Conf. Ser. Mater. Sci. Eng., vol. 1022, p. 012076, 2021.

IT

- 1) Anupama Kaushik, "Role of ANN in Functionality and Designing of Solar Photovoltaic Cell: A Review" in Recent Advances in Mechanical Engineering RAME2020, ISBN: 978-981-15-9678-0 in springer, 2021.
- 2) Suman Mann, Deepa Gupta, Yukti Arora, Shivanka Priyanka Chugh, Akash Gupta, "Smart Hospitals Using Artificial Intelligence and Internet of Things for COVID-19 Pandemic" Smart Healthcare Monitoring Using IoT with 5G Challenges, Directions, and Future Predictions,2021 (1st ed.). CRC Press.
- 3) Sharma P., Kaur P., Saini K. (2021) Secure Protocols for Biomedical Smart Devices. In: Kumar, Singh, Saini (eds) Cybersecurity: Ambient Technologies, IoT, and Industry Implications, Tayler and Francis, CRC Press, ISBN 9781003145042
- 4) J. Arora and M. Tushir, "Digital Twin: Towards Internet of Drones", Digital Twin Technology, CRC Press, 2021.

ECE

- 1) Garima, Nidhi Goel, and Neeru Rathee "Feature Extraction and Classification for Emotion Recognition Using Discrete Cosine Transform" In International Conference on Artificial Intelligence and Speech Technology, pp. 447-454, Springer, Cham, November 2022



1 MR. NAVDEEP BOHRA, MS. NEETI SANGWAN, MS. ASHISH KUMARI AND MR. DINESH SHEORAN WERE GRANTED A PATENT, "REDUCE, RE-CYCLE AND REUSE (RRR) IOT INTELLIGENCE WASTE MANAGEMENT SYSTEM" ON 24TH AUGUST 2021.



2 DR.ARCHANABALYAN,DR.SUMANMANNAND MS.VINITAROHILLAWEREGRANTEDA PATENT"UNCLOG:ADRONE-BASEDTRAFFIC CONGESTIONMITIGATIONSYSTEM"ON17TH NOVEMBER2021.



3 DR. AMAN DAHIYA PUBLISHED A PATENT "IOT BASED SMART WEARABLE SUIT FOR SELF HEALTH ASSESSMENT IN POST COVID ERA" ON 16TH JULY 2021.



4 DR.SHAIFALIMADANARORA,MS.POONAM KADIAN,MS.ANSHULPAREEKANDDR. SUMANMANNPUBLISHEDAPATENT"A SMARTHEALTHCAREMONITORINGSYSTM USINGIOT"ON16THJULY2021.



5 Ms. Tripti Rathee published a patent "A BLOCK CHAIN-BASED SYSTEM FOR PERSONAL DATA VERIFICATION" on 4th August 2021.



6 DR.KOYELDATTAGUPTA,DR.RINKY DWIVEDIANDDR.TRIPTISHARMA PUBLISHEDAPATENT"AWEARABLE SENSORBASEDCUSTOMIZED MENSTRUALCYCLEPREDICTOR"ON15TH OCTOBER2021.

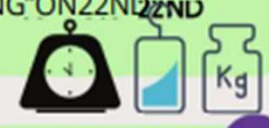


patents

7 DR. KAVITA SHEORAN, DR. PRABHJOT KAUR SIDHU, DR. GEETIKA DHAND AND DR. ANUPAMA KAUSHIK PUBLISHED A PATENT "METHOD FOR TRANSLATING SIGN LANGUAGE USING CONVOLUTIONAL NEURAL NETWORKS" ON 15TH OCTOBER 2021.



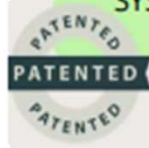
8 DR.BHARTISHARMAPUBLISHEDA PATENT"SMARTPAPERWEIGHTWITH PRODUCTIVITYTRACKING"ON22ND OCTOBER2021.



9 MS.NIDHIGUPTAPUBLISHEDAPATENT "DESIGNANDDEVELOPMENTOFIOTBASED PASSENGERCOUNTINGINTRANSPORTATION SYSTEM"ON29THOCTOBER2021.



10 DR. SHEELA DEVI PUBLISHED A PATENT "DEEP LEARNING ENABLED CLOUD BASEDIOT AND MACHINE LEARNING IMPLEMENTED SYSTEM FOR DETECTING AND PREVENTING HEART ABNORMALITIES" ON 17TH DECEMBER 2021.



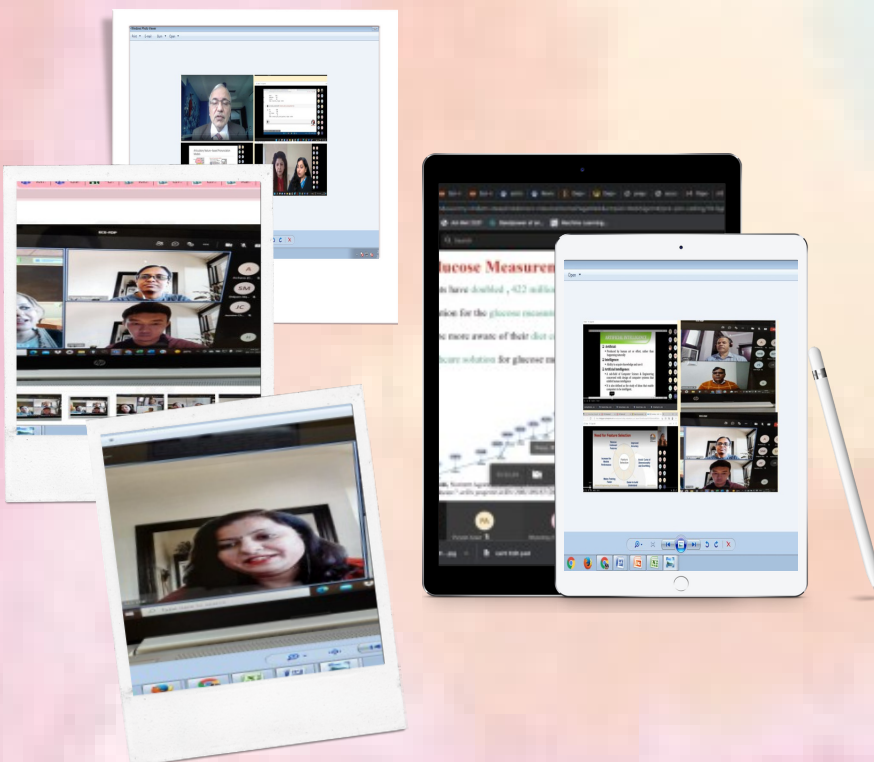
One Week Online Faculty Development Program

Recent Trends in Artificial Intelligence and Its Applications

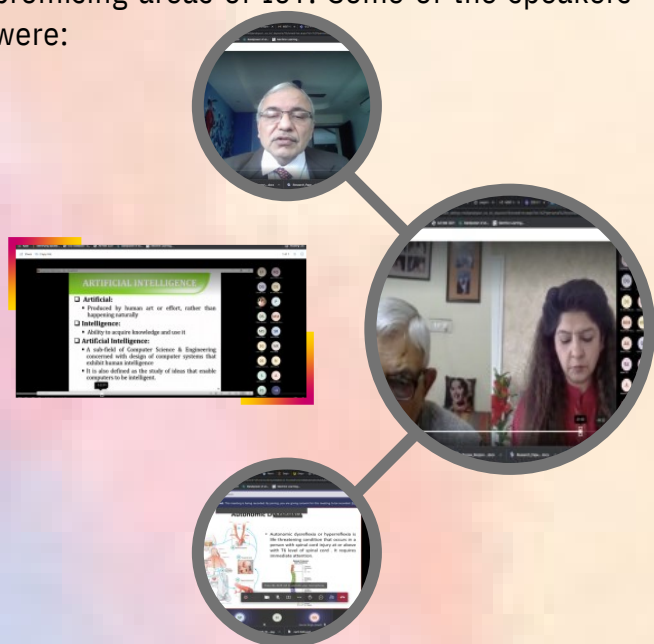
Dr Shaifali M. Arora, Associate Professor, Department of ECE, organized a one week FDP with Dr Dinesh, Dr Poonam, Ms Geetanjali, (Co-conveners) on **Recent Trends in Artificial Intelligence and Its Applications** from 29th November to 3rd December 2021. More than 100 participants from various Engineering colleges attended the FDP. The main objective of this FDP was to give exposure to participants from basics to recent trends and updates in the field of Artificial Intelligence and its significance in real world applications. **Col. B. Venkat, Director, AICTE; Prof T. Srinivas, Professor**, IISC Bangalore were the invited dignitaries for the inaugural ceremony. The expert sessions in the FDP were delivered by **Dr Amit Joshi**, Assistant Professor, MNIT, Jaipur; **Dr. Siddharth Pancholi**, Research fellow, Post Doc Purdue University, USA; **Dr Meenakshi Gupta** and **Dr Lin**, who are currently associated with Rehabilitation Research Institute of Singapore; **Dr. Vijandar Singh**, Professor, NSUT, New Delhi; **Dr. Kavita Khanna**, Professor, Northcap University, Gurugram; **Prof. Vineet**, NSUT, New Delhi; **Prof. Archana Balyan** HOD, ECE, MSIT; **Dr. Navin Rajpal**, Professor, USICT, GGSIPU, New Delhi; **Dr Pawan Dahiya**, Professor, DCRUST, Murthal. Along with expert lectures, practical sessions were conducted in association with Brain Mentors Pvt. Ltd. The resource person **Mr. Ravikant** explained implantation of Python from basics to advance and implementation of Covid-19 detection using X-Ray/CT scan images using Deep learning, CNN and CNN-GRU. The FDP came to an end with online valedictory ceremony. **Prof Amita Dev**, Vice Chancellor, IGDTU was the chief guest for the valedictory ceremony. Hon'ble Chairman, **Sh. Kaptan Singh Ji** congratulated the organising team for successful completion of FDP and appreciated their efforts. **Prof. Archana Balyan** HOD, ECE, MSIT, congratulated all the participants for their active participation and successful completion of FDP.

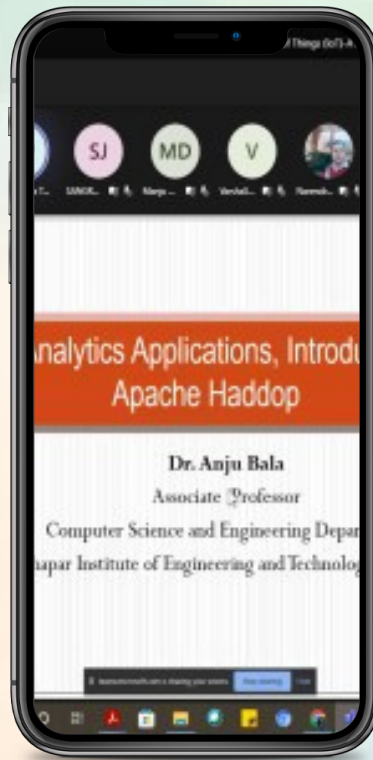
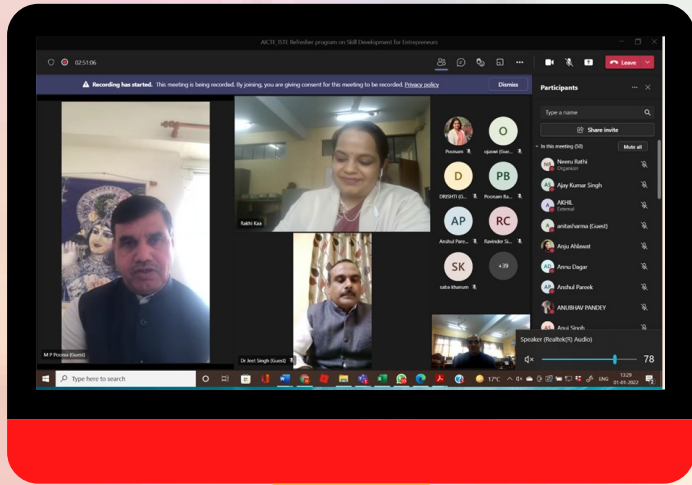
ATAL Sponsored 1 week Online FDP on "Internet of Things (IoT)- A Practical Approach "

Department of Information Technology, MSIT has organized ATAL sponsored 1 week online FDP on the topic "**Internet of Things-A Practical Approach**" from 6th-10th December, 2021. This was the first ATAL (AICTE Training and Learning) sponsored FDP of MSIT organized by IT department. Dr. Prabhjot Kaur was the coordinator of FDP. Total 194 participants from 21 states have registered for this FDP. Speakers from the reputed institutions have given talk on various promising areas of IoT. Some of the speakers were:



Dr. Md. Iftekhar Hussain, Associate Professor, North Eastern Hill University, Shillong, Meghalaya, Prof. G. K. Srinivas, NITTTR, Chandigarh, Dr. Debashis De, Professor, Maulana Abul Kalam Azad University of Technology, West Bengal, Dr. Lalit Kumar Singh, Scientist, NPCIL-BARC, Govt. of India, Mumbai, Maharashtra etc. Total 14 sessions, each of 2.00 Hrs. duration (including 30 minutes Q/A session), were conducted during these 5 days. Some of the topics discussed during this FDP were: IoT Actuators, Sensors and Protocols, Application of IoT in Agriculture Science, Introduction to IoT based Simulation Tools, IoT Design and Methodology: A Hand-on Approach with Arduino, Raspberry Pi and ESP8266.



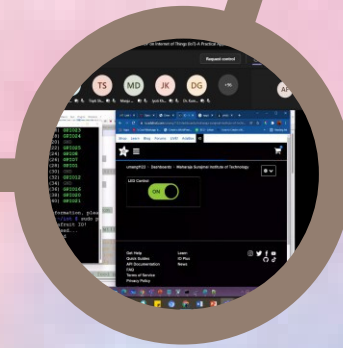


On 10th Dec., 2021 at 2 pm, feedback session was conducted by the coordinator of the FDP, Dr. Prabhjot Kaur. Many participants gave their feedback about the FDP content and the speakers. At the end the coordinator gave vote of thanks to the participants, management, director of the college and the organizing team.

One week online Refresher Program on Skill Development for Entrepreneurs

eCell MSIT organized AICTE-ISTE sponsored Refresher Program on "Skill Development for Entrepreneurs" for faculty members across India from 27th December- 1st January, 2022 in online mode. The programme was well aligned with "Startup India", a flagship initiative by government of India, "Aatmanirbhar Bharat" and 'National Student and Faculty Startup

Policy-2019' which is an initiative of MHRD's Innovation Cell and AICTE. The programme started with inauguration by eminent resource persons such as Dr. Pratap Singh Desai, President, ISTE, Er. Kaptaan Singh, Chairman SMES, Dr. N.K. Gupta, National Executive Council Member, ISTE, Col. Ranjit Singh, Director MSIT, Dr. H.S. Rawat, Director TP & IR, SMES.





STUDENTS ACHIEVEMENTS



Computer Science and Engineering



ANUSHKA JADHAV (5TH SEM, CSE) OBTAINED 1ST POSITION IN ASEAN INDIA HACKATHON IN 2021

PRIYA KUMARI (3RD SEM, CSE) WAS WINNER OF AI SHALA WORKSHOP IN 2021



Ekjot Kaur, Bhavya Sehgal (CSE, 3rd yr): Top Performers in GirlsScript Summer of Code, 08-03-2021 to 31-05-2021

Shubh Ashish Purohit (CSE, 3rd yr): Battle of bands winner IMT Ghaziabad, 11-12-2021



Electronics and Communication Engineering



Samiksha (3rd Sem ECE) participated in PM's Yuva Mentoring Scheme in 2021



Aditya Kumar Srivastava has been awarded certificate for securing 4995th rank from Code Kaze'21, Online Coding Event in 2021

Eishan Deshwal (3rd Sem ECE) in 2021: panelist finals semi-finals Panelist and Subsidized adjudicator Shri ram debating festival 2021 (SRCC)



Subsidized adjudicator Pratijja 2021; panelist of 6th breaking team (open) Dialectics 2021 Champions (Speaker) Monoliths 2021 (Motilal Nehru College)

2nd best speaker 7th breaking team(open) People speak 2021 (3rd best team based on speaker scores)

13. Conventional Debate (St. Stephen's Debate) 2021



Ishaan Gill of 7th Sem has been awarded 2500 US dollars scholarship from Linux foundation.

Abhijeet Anand of 7th Sem was Invited as a Guest Speaker to deliver a session on " From Business Idea to First Sale" by Entrepreneurship and Incubation Cell, SLIET, Longowal in 2021.



Satyam Mishra, Devang Pandey, Rahul Rana of 7th Sem, ECE(M) have been awarded with Best paper award in International Conference on Industrial Electronics and Research Applications (ICIARA), 2021

Applied Science



Mr. Gunaj Gaur from IT, third year (IInd shift) secured second prize in the 'Literary Extempore' competition on 6th September, 2021 under the 2-day National Literary Fest "Litdeas" organized by the dpt. of English, MRIIRS, Faridabad under the supervision of Dr. Rashmi Gupta

Information Technology



Harshita Chopra (IT, 4th yr) worked as a Research Intern at Adobe for three months during the summer of 2021, in the field of Machine Learning.

Harshita Chopra (IT, 4th yr) won the student Scholarship to attend the 2021 Gracehopper Celebration as a GHC Scholar

Monalika Kapoor (IT, 3rd yr) got selected as the Generation Google Scholarship APAC Recipient'21 (One of the 70 scholars selected across 16 countries of the APAC region).

Monalika Kapoor (IT, 3rd yr) got selected as the Nutanix Women In Technology Scholarship Recipient'21 (One of the 12 girls selected from the US, France, Netherland, India & Serbia).

Monalika Kapoor (IT, 3rd yr) got selected as the Grace Hopper Celebration Scholar 2021.

Tanay Aggarwal (IT, 3rd yr) got designated by the government of NCT of Delhi and The Japan Science and Technology Agency, as a delegate to Fukuoka, Japan for research & development in 2021.

Tanay Aggarwal (IT, 3rd yr) got accepted as a delegate by The Harvard Project for Asian and International Relations for Harvard College Conference 2021.

Electrical and Electronics Engineering



Ashutosh Das of EEE got placed in ALPHA TND LIMITED with a package of Rs. 18,00,000/- per annum (approx.).

Soumya Chaudhary of EEE 2nd year has participated in 35th National Taekwondo ITF Championship 2021 on 24th January, 2021. She has secured 2nd position.



EVENTS

2021-2022



TAG OF WAR

Organized an interactive and amusing event, TAG-OF-WAR on Google Meet platform which saw active participation of over 80 contenders.

Date : 9TH July 2021

Organized by : E-cell



WEBINAR ON CRYPTO INVESTMENT

A detailed description about block chain technology which to students .



Date : 30TH July 2021

Organized by : E-cell

Guest : Ashutosh Kashyap



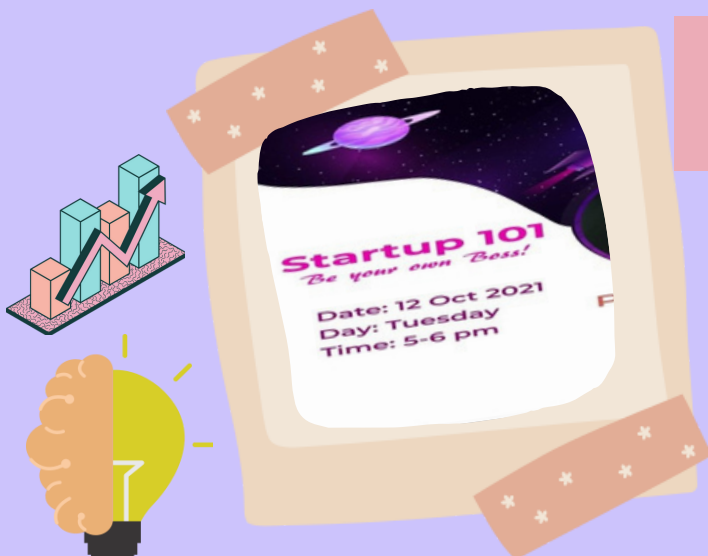
BUSINESS AND STARTUP WEBINAR

The event named Startup 101 was organized it gave an detailed information about how startups works and how to grow startups.

Date : 12th October 2021

Organised by : E-CELL MSIT

Guest : Paresh Gupta





ENVISAGE - 2021

It is basically a ideathon .It was a three stages or level competition where the final round was held on Zoom platform. A total of 70 teams registered during our registration period, where we got registration from across India.

Date : 23rd October 2021

Organized by : E-CELL MSIT



THE PROCESS OF RAISING INVESTMENT

The host Mr. Sunil Sureka, Founder, Simco Consultancy gave an idea on how to raise investments . Later topics like IPOs and firm valuation were also discussed for this real life examples were used. The event saw active participation of over 50 participants.



Date : October 27, 2021

Organized by : E-CELL MSIT



POWER HOUR VENTURE'21



Event was organised to increase knowledge and awareness about entrepreneurship, business and marketing among the students. The event was also hosted on D2C and was a 2-day event. he event commenced with a quiz on 11th November and was rounded up on 13th November after the Business Development Plan round.

Date : 11TH - 13TH November

Organised by : E-CELL and NSS MSI

E-CELL ORIENTATION - 2021

Session for the freshers and for the start of the new tenure and to recruit new members on the platform, Microsoft Teams.This meeting explained the fresher and all the participants , all about the E-Cell Entrepreneurship Society of the MSIT Institute.



Date : 13th December,2021

Organized by : E-CELL MSIT

MENTAL HEALTH WEEK

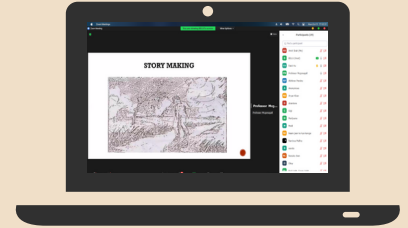
Organized the Chamber of Secrets- an activity to provide a comfortable space for the audience to interact and express their viewpoints among the fellow participants.



Date :10/10/2021 to 17/10/2021

Organised by : Prakriti MSIT ,NSS MSIT and Unnat Bharat Abhiyan

Guest : Ms. NEHA JAIN



CLOTHES DONATION DRIVE

The drive facilitated in collection of a large number of clothes. In the campaign students were urged to donate their old clothes for the impoverished and needy. An overwhelming response from students was seen.



Date :14/11/2021 to 03/12/2021

Organised by : Prakriti MSIT in collaboration with NSS MSIT



ADIÓS '21

In collaboration with Tark MSI organized a debate competition "Raaye-'aama" in the Auditorium. The objective of the event was to provide participants with a platform where they can dictate their thoughts through debate.



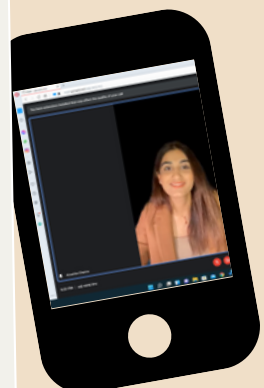
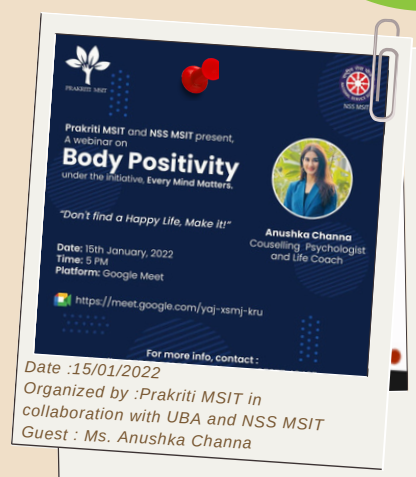
Date:27/12/2021 to 28/12/2021

Organized by : Prakriti MSIT , UBA and NSS MSIT



BODY POSITIVITY

This webinar was conducted under the initiative Every Mind Matters, which aims to encourage individuals to take easy measures to protect their mental health, enhance their mental wellness, and help others.

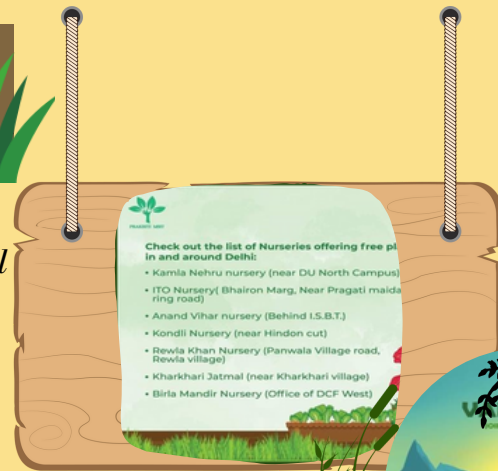


VAN MAHOTSAV WEEK

The celebration was an ideal opportunity to instill the value of social responsibility towards safeguarding trees, forests and various other activities for the green environment.

Date :01/7/2021-07/7/2021

Organized by : Prakriti MSIT in collaboration with NSS MSIT



FUTURE EMPLOYABILITY SKILLS

The webinar was inspired by this year's Youth Skill Day theme, which honors youth's persistence and ingenuity in the face of hardship, as well as skill providers that have adapted their learning delivery techniques to suit the epidemic's requirements



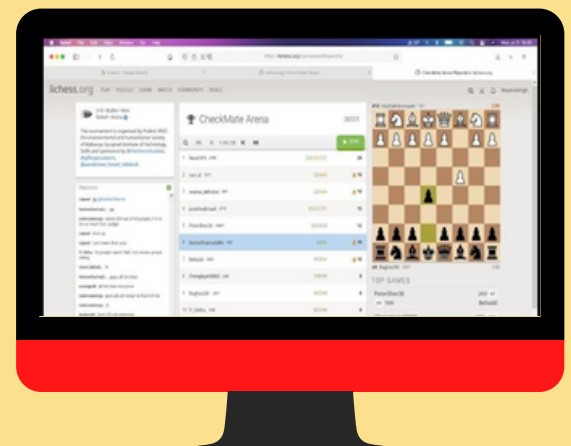
Date : 15/07/2021

Organized by :Prakriti MSIT in collaboration with NSS



CHECKMATE

Event was organised on the occasion of International Chess Day, which is celebrated annually on proposal from UNESCO. The competition was conducted on Dare 2 Compete and saw a remarkable 540 registrations.



Date : 15/07/2021

Organized by :Prakriti MSIT in collaboration with NSS



PLANTATION DRIVE

The Chairperson, the Directors, teachers, and students planted over 20 saplings across the gardens of the college while following the Covid Guidelines. To augment & emphasise the objective of the event, students carried hand-made banners and boards depicting the significance of plants & trees, and the name of the event.

Date : 11/08/2021

Organized by : NSS cells MSIT in collaboration with Prakriti MSIT, Environmental and Humanitarian Society MSIT



CLEANLINESS DRIVE

Conducted a Cleanliness Drive under Swachhta Pakhwada Mission .The main objective of this program was to create awareness among the students regarding Cleanliness and its benefits. And to take leap forward in the direction of environmental hygiene



Date : 11/08/2021

Organized by : Prakriti MSIT in collaboration with NSS MSIT

CYBER SAFETY AWARENESS

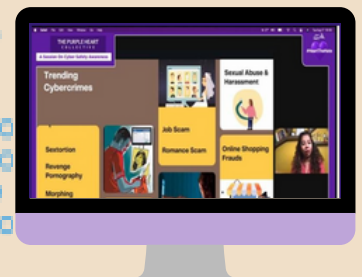
It was The Purple Heart Collective, presented by Cadbury Dairy Milk India and the session was taken by Ms. Nirali Bhatia, a cyber psychologist, TEDx speaker and Founder at Cyberbaap.



Date : 17/08/2021

ORGANISED BY :Prakriti MSIT and Shivaji College, Delhi University

GUEST : Ms. Nirali Bhatia

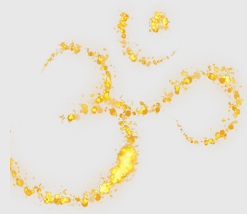


Join us for the webinar on **YOGA: LIVING FIT**
The key to all knowledge. It's within you, waiting to be unlocked.

- Wear comfortable clothing.
- Be ready with a yoga mat or blanket.
- Try to keep a bottle of water with you.

DATE : 28th AUGUST 2021
 TIME : 5-6 P.M.
 Hosted by/PrakritiYoga

Greesha Dhingra
 @greesha_yogini



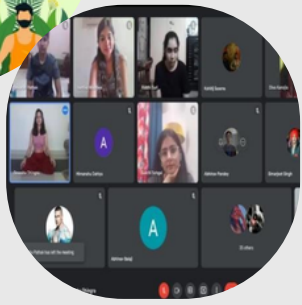
YOGA: LIVING FIT

It was an immersive and informative session in which over 50 students participated through Google Meet and performed yoga as instructed by the instructor

DATE : 28/08/2021

ORGANISED BY : PRAKRITI MSIT

GUEST: Ms. Greasha Dhingra



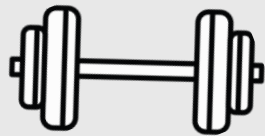
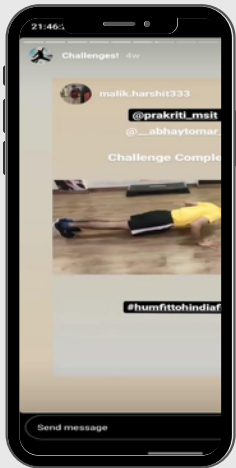
FOOD DONATION DRIVE

It is observed to raise public awareness about nutrition and healthy eating habits so that people can maintain a healthy lifestyle. 'Feeding smart right from the start is the focus of National Nutrition Week in 2021.

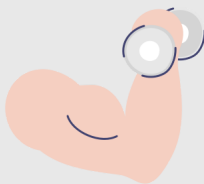


DATE : 03/9/2021

Organised By : Nss Msit And Prakriti Msit



FITINDIA ONLINE CHALLENGE



Prakriti's members challenged other students and their friends to do simple exercises which included planks, pushups, long runs, etc.

DATE : 04/09/2021

ORGANISED BY : PRAKRITI MSIT



EVERY MIND MATTERS

On the account of World Suicide Prevention Day started a monthly series, To remove the stigma around mental health in the society and to provide solutions to students' problems that they are hesitant to share with others and seek help.

World Suicide Prevention Day
 Prakriti MSIT and NSS MSIT present
Every Mind Matters
 (a monthly series).

Ask all your mental health related questions and she'll be happy to provide a headspace.

This month's mind coach is Sakshi, a Life & Performance Coach.



DATE : 10/9/2021

Organized by : Prakriti MSIT



SPORTIFY

The day witnessed various events, Boys' 100 M sprint race, Boys' Relay Race, Boys' Long Jump, Girls' 100 M sprint, Girls' Long jump and then the Relay race.



DATE : 24/9/2021
ORGANISED BY : NSS MSIT and Prakriti MSI



ETHNIC DAY

This event focused on carrying forward the tradition of India and its diversity. All the students dressed up in ethnic or traditional wear in the spirit of Diwali. The campus was decorated traditionally.

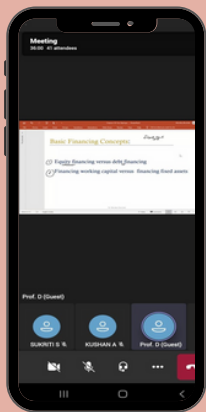


DATE : 29/10/2021
ORGANISED BY : NSS AND PRAKRITI MSIT

WEBINAR ON ANGEL INVESTING / VC FUNDING OPPORTUNITIES



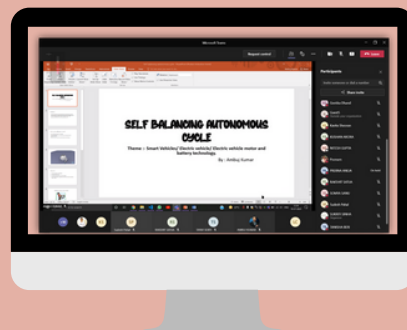
Professor Monika Dhochak told the important things that are required to make a startup successful and some Do's and Don'ts for startup, Grabbing the opportunities and finding the sources of funds: Bootstrapping, Seed financing, Angel investors, Venture capital financing were discussed.



Date : 15/6/2021
Organized by : IIC MSIT
Guest : Professor MONIKA DHOCHAK

IDEATHON'21 STAGE 2

It aimed to encourage students to participate and provide their innovative and unique ideas that would be sustainable and focus on social causes. Types ideas that were discussed: Self-balancing autonomous cycle, Interactive public speaking training, Prevention from post-harvest storage loss, An app based on a collection of books.



Date : 10/7/2021
Organized by : IIC MSIT, in collaboration with MHRD's Innovation Cell

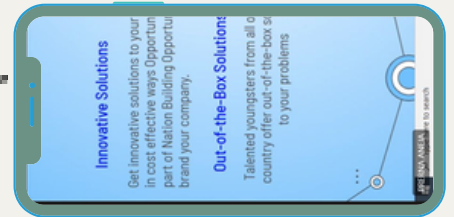
ORIENTATION FOLLOWED BY MOTIVATIONAL TALK BY SUCCESSFUL INNOVATORS

Dr. Sudesh Pahal and student coordinators explained how IIC MSIT supports entrepreneurship, innovation and startup culture. Rakshit Satija (Guest) shared his experience how he found interest in building automation products in his final year of engineering with a vision to transform the post-harvest (Agricultural) industry in India.

Date :17/12/2021

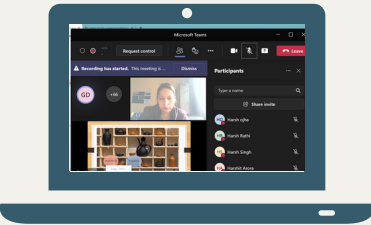
Organized by : IIC MSIT

Guest : Dr. Sudesh Pahal , Rakshut Satija



WEBINAR ON THE TOPIC OF "PROBLEM SOLVING & IDEATION"

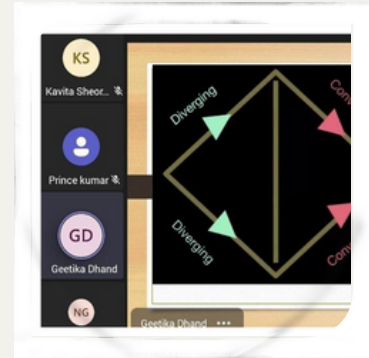
The webinar explain how students can shape & develop their mindset as budding entrepreneurs to think of the most versatile ideas and design thinking capabilities.



Date : 22/12/2021

Organized by : ICC MSIT

Guests : Dr. Sudesh Pahal, Dr. Geetika Dhand,



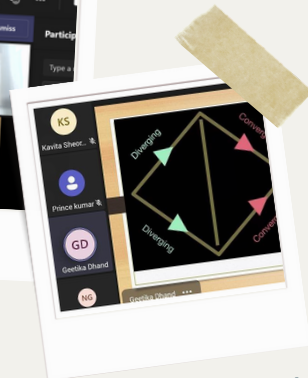
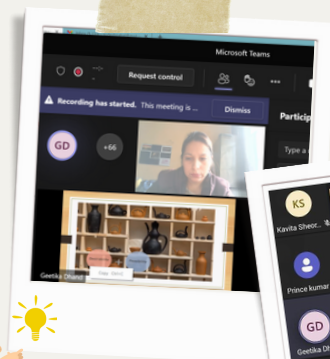
WEBINAR ON THE TOPIC OF "ENTREPRENEURSHIP & INNOVATION AS A CAREER OPPORTUNITY"

Webinar aimed discuss with students about how to develop business models & ideas for startups, evaluating these ideas & also learning about our Intellectual Property Rights (IPRs).

Date : 23/12/2021

Organized by : ICC MSIT

Guests : Dr. Neeru Rathee, Dr. Kavita Sheoran, Dr. Poonam Dahiy



CELEBRATION ACTIVITY ON NATIONAL POLLUTION CONTROL DAY

Event raised the awareness about pollution among the students of the institute with the help of a poster designing competition. The young students actively participated in the event and used their creativity to design innovative posters.



Date : 2.12.2021

Organized by : ICC MSIT





CHIEF EDITOR : Dr. SHAIKALI M.ARORA , ASSOCIATE PROFESSOR , ECE

EDITOR : Dr.POONAM , ASSISTANT PROFESSOR , ECE

Dr. JINDGI KUMARI , ASSISTANT PROFESSOR , APPLIED SCIENCE

Ms. DEEPSHIKHA YADAV , ASSISTANT PROFESSOR , ECE

STUDENT EDITOR : ATUL PARASHAR (4THSEM –ECE)

VISHAKHA GAUTAM (4THSEM –ECE)

AMAN KUMAR PANDEY (4TH SEM -ECE)

ANUSHRI JAIN (4TH SEM -ECE)