

NEWS LETTER OF GMRIT NITYAVIKASH

A PLATFORM FOR A CHANGE



VOLUME-17 ISSUE-1

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ABOUT US

GMR Institute of Technology was established in the year 1997 by GMR Varalakshmi Foundation – the corporate social responsibility arm of GMR Group – GMRIT offers aspiring engineers high quality technical education. Located in Rajam, Vizianagaram district of Andhra Pradesh, GMRIT provides its learning community state-of-the-art facilities, infrastructure and a competent faculty. The Institute encourages collaborative learning between industry and academia as a means of reinforcing its curriculum with practical and real world experiences. It is this emphasis on a well-rounded education that makes GMRIT a preferred institute among engineering colleges in India. It offers nine undergraduate and six Postgraduate programs . All the UG Programs are accredited by NBA under Tier-1(Phase 4) and the institution is accredited by the NAAC with A Grade(3rd Cycle). GMRIT is ranked among top 5 colleges in state of AP and among top 50 in the country level. In placements 95% of the students gets placed every year with a medium salary around 5 LPA and maximum salary of 34 LPA.

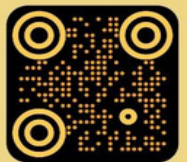
PROGRAMS OFFERED

B.TECH PROGRAMS

- Chemical Engineering
- Civil Engineering
- Computer Science and Engineering
- CSE-Artificial Intelligence and Data Science
- CSE-Artificial Intelligence and Machine Learning
- Electronics and Communication Engineering
- Electrical and Electronics Engineering
- Information Technology
- Mechanical Engineering

M.TECH PROGRAMS

- CSE-Cyber Security
- Environmental Engineering
- Power and Industrial Drives
- Thermal Engineering
- Transportation Engineering
- VLSI and Embedded Systems Design



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GMR INSTITUTE OF TECHNOLOGY

An Autonomous Institute affiliated to JNTUGV

VIZIANAGARAM (DIST),532127

ANDHRA PRADESH

Achievements:

- GMRIT Ranked 20th among the private colleges in the south zone and ranked 27th at the country level by Data Quest DQ -CMR
- GMRIT Ranked 88th in overall ranking at the country India level; ranked 62nd Rank among the private intuitions at the country level and ranked 36th in the South Zone by The Week (HANSA RESEARCH SURVEY)
- Registered the Institute Innovation Council (IIC) for the Academic Year 2022-23 as per the guidelines of Ministry of Education's Innovation cell.
- Department of Mechanical, Civil, EEE, ECE&CSE Re-accredited by NBA under Tire-1 for three years i.e till June 2025.



- Achieved All over Championship at State level as Runners under Men (Junior) and Women (Junior & Sub-Junior)

Institute Related:

- GMRIT hosted JNTUK Kakinada Ball Badminton Women Selection trials on 21st January 2023
- The 15th edition of STEPCONE 2023 was organized on 24th & 25th January 2023 and Dr G V R Prasada Raju, Hon'ble Vice Chancellor, JNTU-GV inaugurated the same. Around 330+ participants from 33 different colleges from five states participated and 2800+ internal students participated.



- NBA expert committee visited for re-accreditation on 6th to 8th January 2023 for the five branches (Civil, Mech, EEE, ECE & CSE).
- Mr. Augustin de Romanet, Chairman and CEO of Groupe ADP visited the campus on 24th February 2023 and address the students and staff. Group Chairman Sri G.M. Rao presided over the event.



- Chemical Department conducted a workshop on "Safety" on 25th January 2023. Mr. Molleti

Bhaskarrao, Managing Director, Surya Consultancy Services was the resource person for workshop.

- Republic Day Celebrated on 26th January 2023 and conducted 1k patriotic run.



- BS&H (Maths) department conducted a five day FDP on "Applications of Mathematics in Applied Sciences and Engineering" in association with NIT, Warangal during 30th January to 3rd February 2023.
- GMRIT NSS unit conducted awareness campaign at Govt schools in Rajam on occasion of National Girl child day.



- External BoS in the presence of Academic representatives (University Nominees), Alumni Representatives and Industry Representatives was held on 25.02.2023, for the two specialization CSE- AIDS, CSE-AIML.
- Mr Rama Santhosh Namburi, Assistant Manager, Shell India, delivered Guest lecture on 24th February to the Chemical Engineering students on " Process Engineering in Oil and Gas Industries"

Academic Achievements:

Technical Paper Publication in Conferences

- Manohar, T., et al. presented a paper on "Utilization of Different Supplementary Cementitious Materials and Recycled Concrete Aggregate for Stabilization of Pavement Base Layer", Proceedings of Indian Geotechnical and Geoenvironmental Engineering Conference (IGGEC) 2021, Vol. 2. IGGEC 2021. Lecture Notes in Civil Engineering, vol 281. Springer, Singapore. (indexed in Scopus,Q4) (ISSN: 978-981-19-4731-5)(https://doi.org/10.1007/978-981-19-4731-5_12)
- T S Kishore, et al. presented a paper on "Performance Assessment of FACTS Devices for Enhancing Stability and Control in Power Systems", International Conference on Information System Design and Intelligent Applications (INDIA – 2022) February 25-26, 2022, BVRIT College of Engineering for Women, Hyderabad, Telangana, India (Indexed in : Scopus)
- Dr. P. Upendra Kumar et al. presented a paper on "Potential Assessment of Wind Power Generation using Machine Learning Algorithms for Southern Region of India", 7th International Conference on Information System Design and Intelligent Applications (INDIA-2022), 25th-26th February 2022, held at BVRIT college of Engineering for women, Hyderabad, India. (Indexed in : Scopus)
- Srinadh, V., et al. presented a paper on. "Dual Image-Based High Quality Digital Image Watermarking". In: Dash, R.N., Rathore, A.K., Khadkikar, V., Patel, R., Debnath, M. (eds) Smart

- Technologies for Power and Green Energy. Lecture Notes in Networks and Systems, vol 443. Springer, Singapore, 2023. https://doi.org/10.1007/978-981-19-2764-5_14
- Sahukari, et al. presented a paper on “A Framework for Glaucoma Diagnosis Prediction Using Retinal Thickness Using Machine Learning.” In: Dash, R.N., Rathore, A.K., Khadkikar, V., Patel, R., Debnath, M. (eds) Smart Technologies for Power and Green Energy. Lecture Notes in Networks and Systems, vol 443. Springer, Singapore., 2023. https://doi.org/10.1007/978-981-19-2764-5_6
 - Vadamodula, P ,et al. presented a paper on “Design and Development of a Digital Preservation Voice Enabled Application for Cultural Heritage Towards Fishing in Vernacular Language” Pervasive Computing and Social Networking. Lecture Notes in Networks and Systems, vol 475. Springer, Singapore, 2023. https://doi.org/10.1007/978-981-19-2840-6_23
 - Sahu, S., et al. presented a paper on “Analysis of Road Accidents Prediction and Interpretation Using KNN Classification Model”, Emerging Technologies in Data Mining and Information Security. Lecture Notes in Networks and Systems, vol 490. Springer, Singapore, 2023. https://doi.org/10.1007/978-981-19-4052-1_18
 - Ashutosh Kumar Choudhary presented a paper on “Evolution of low power Blockchain Technology by using iterative Sharding for IOT environment” in IEEE sponsored opju international conference held at op Jindal University, Raigarh during 8th - 10th Feb 2023.
 - P. Someswari presented a paper on “Traffic sign detection using Deep learning techniques” in the 2023 IEEE Sponsored Third International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2023) held at the Department of Electrical and Electronics Engineering, Shri Shankaracharya Technical Campus (SSTC), Bhilai, Chhattisgarh, India during 05 - 06, January 2023.
 - J. Ravi kumar , presented a paper on “Real Time Comparative Analysis between Solar Fixed Plate and Tracking Methodology”, 2nd Odisha International Conference on Electrical Power Engineering, Communication and Computing Technology (ODICON), January, 2023. DOI:10.1109/ODICON54453.2022.10010223 <https://ieeexplore.ieee.org/xpl/conhome/10009904/proceeding>. (Indexed in : Scopus)
 - R. Vijaya Krishna, presented a paper on “Prediction of wind speed and power using an efficient Deep kernel algorithm”, 2nd Odisha International Conference on Electrical Power Engineering, Communication and Computing Technology (ODICON), January, 2023 DOI: 10.1109/ODICON54453.2022.10010330, (Indexed in : Scopus)

Journal Publications:

- M. P. Srinivasa Rao, et al. published a paper on “Design and Analysis of Suspended Core Photonic Crystal Fiber Formed by Semicircular Air Holes Near the Core, International Journal Of Microwave And Optical Technology, Vol.18, no.1, pp. 86-95, January 2023.(Scopus), (IF: 0.394)<https://www.ijmot.com/VOL-18-NO-1.aspx>
- Rajendra Kumar Dash et al. published a paper on "Analytical study of Santa Montefiore's Songs of Love and War", THIRD CONCEPT: An International Journal of Ideas, pp 31-33, Vol. 36, No. 431 JANUARY 2023. ISSN 0970-7247.
- Gokulan R, et al. published a paper on "Investigation of Copper Ion adsorption using Activated Sawdust Powder: Isotherm, Kinetic and Thermodynamic studies", Global NEST Journal, October 2022, (Impact Factor: 1.04) (Indexed in SCI and Scopus, Q3) (ISSN: 1108-4006, 1790-7632), DOI: <https://doi.org/10.30955/gnj.004496>
- Gokulan R, et al. published a paper on "Ziziphus Jujube Seeds derived Biomass as Cost-Effective Biosorbent for the removal of Cr6+ from Aqueous solutions: Isotherm and Kinetic Studies", Global NEST Journal, November 2022, (Impact Factor: 1.04) (Indexed in SCI and Scopus, Q3) (ISSN: 1108-4006, 1790-7632), DOI:<https://doi.org/10.30955/gnj.004497>
- Gokulan R, et.al., "Studies on Influence of Process Parameters in Upgradation of Bio-oil Derived from HTL of Domestic household waste: Application of Response Surface Methodology", Global NEST Journal, October 2022, (Impact Factor: 1.04) (Indexed in SCI and Scopus, Q3) (ISSN: 1108-

- 4006, 1790-7632), DOI:<https://doi.org/10.30955/gnj.004445>.
- Naga Siva Pavani Peraka et al. published a paper on “Stakeholder-Oriented Optimization of Pavement Maintenance Interventions Using Multi-Criteria Decision-Making Approach”, International Journal of Pavement Research and Technology, January 2023 (Impact factor:1.66)(ISSN: 1997-1400)(Indexed in Scopus,Q2)(DOI: <https://doi.org/10.1007/s42947-022-00269-5>)
 - Sridhar Jayaprakash, et al. published a paper on “Evaluation of Artificial Neural Network Predicted Mechanical Properties of Jute and Bamboo Fiber Reinforced Concrete Along with Silica Fume”, Journal of Natural Fibres, Vol. 20, No. 1, pp.20 pages,05/01/2023.(ISSN No.: 1544-046X)(SCI,Q1,IF:3.50) (<https://doi.org/10.1080/15440478.2022.2162186>).
 - Sridhar Jayaprakash, et al. published a paper on “Influence of Slag-Based Geopolymer Concrete on the Seismic Behavior of Exterior Beam Column Joints”, Sustainability, No.15,pp 15 pages, January 2023 (Impact factor:3.889)(Indexed in SCI,Scopus,Q1)(ISSN: 2071-1050)(DOI: <https://doi.org/10.3390/su15032327>)
 - Gokulan R et al. published a paper on “Biodecolorization of Reactive Red 120 in batch and packed bed column using biochar derived from *Ulva reticulata*”, Biomass Conversion and Biorefinery, 2023(Impact factor:4.05)(Indexed in SCI,Q2)(ISSN: 2190-6815) (doi.org/10.1007/s13399-020-01268-x)
 - Vijayakumar A. et al. published a paper on,”Biochar derived from *Caulerpa scalpelliformis* for the removal of Reactive Yellow 81 in batch and packed bed column, Biomass Conversion and Biorefinery, 2023(Impact factor:4.05)(Indexed in SCI,Q2)(ISSN: 2190-6815)(DOI: <https://doi.org/10.1007/s13399-020-01156-4>
 - Praveen Saravanan et al. published a paper on “Batch Studies of Turquoise Blue Dye (TB) Adsorption onto Activated Carbon Prepared from Low-Cost Adsorbents: An ANN Approach” Biomass Conversion and Biorefinery, February 2021.(Impact factor:4.05)(Indexed in SCI,Q2)(ISSN: 2190-6815) (DOI: <https://doi.org/10.1007/s13399-021-01355-7>)
 - Sridhar Jayaprakash, et al. published a paper on “Prediction of the Mechanical Properties of Fibre-Reinforced Quarry Dust Concrete Using Response Surface and Artificial Neural Network”, Advances in Civil Engineering, Vol.2023, 13 Pages, January 2023, (Impact factor:1.843) (ISSN: 1687-8094) (Indexed in SCI, IF:1.843,Q2) (DOI:<https://doi.org/10.1155/2023/8267639>)
 - Karthick K et al. published a paper on “Mitigation of supply current harmonics in fuzzy-logic based 3-phase induction motor”, International Journal of Power Electronics and Drive Systems (IJPEDS), Institute of Advanced Engineering and Science (IAES) Indonesia, p-ISSN: 2088-8694, e-ISSN 2722-256X, Vol 14, No 1, pp.266-274, March 2023, (Indexed by SCOPUS, Q3, IF:DOI: <http://doi.org/10.11591/ijpeds.v14.i1.pp266-274>)
 - Vinay Kumar M et al. published a paper on “Environmental Impacts of the Solar Photovoltaic Systems in the Context of Globalization”, Ecological Engineering and Environmental Technology, 2023, 24(2), pp. 231–240 (Indexed in Scopus, IF:, DOI: <https://doi.org/10.12912/27197050/157168>)
 - P. Satya Sagar et al. published a paper on “Lipid bioproduction through optimization of thermal diluted acid pretreatment on native grass using *Yarrowia lipolytica*”, Fuel, 333, 2022, 126475 (SCI Indexed, Q1) <https://doi.org/10.1016/j.fuel.2022.126475>
 - Divakar Pamanji, et al. published a paper on “Production and optimisation of biodegradable LDPE packaging films strengthened with inorganic filler through response surface methods using central composite design”, Indian Chemical Engineer (ESCI, Scopus Indexed), <https://doi.org/10.1080/00194506.2022.2162447>
 - Sridhar Jayaprakash et al. published a paper on Influence of Slag-Based Geopolymer Concrete on the Seismic Behavior of Exterior Beam Column Joints”, Sustainability, No.15,pp 15 pages, January 2023 (Impact factor:3.889)(Indexed in SCI,Scopus,Q1)(ISSN: 2071-1050)(DOI: <https://doi.org/10.3390/su15032327>)
 - Kanchanamala, et al. published a paper on “PV. Hybrid optimization enabled deep learning and spark architecture using big data analytics for

- stock market forecasting. Concurrency Computat Pract Exper. 2023; e7618. doi: 10.1002/cpe.7618
- Suniti Purbey published a Patent on Personalized Driver Behavior Analysis and Alert Message Dissemination System Design Using Cloud Environment on 10th Feb 2023.
 - Suniti Purbey has published a Patent on System for the Automated Evaluation of Bone Age based on X-Ray Images through the Use of Image Registration and Machine Learning on 17th Feb 2023.
 - Gopa, Dinesh Reddy et al. published a paper on "Green synthesis of silver nanoparticles from *Aspergillus flavus* and their antibacterial performance" Chemical Product and Process Modeling, 2023, pp. 1-8, ISSN: 1934-2659, Scopus indexed. <https://doi.org/10.1515/cppm-2022-0054>
 - V. S. S. Venkatesh, Kalapala Prasad et al. published a paper on "Effect of SiC and TiC Reinforcements on the Mechanical Properties of ZrB₂SiC TiC Hybrid Composite Fabricated Through Spark Plasma Sintering", Silicon, pp. 1-13, ISSN: 1876-9918, Dec. 2022, (SCIE and Scopus) <https://doi.org/10.1007/s12633-022-02263-9>
 - M. Srinivasa Rao, et al. published a paper on "Advanced Soft Computing Tools/Optimization Techniques Used for the Analysis of Metal Matrix Composite Materials", Journal of Recent Activities in Production, Vol. 7, Issue 3, ISSN: 2581-9771, <http://matjournals.co.in/index.php/JoRAP/article/view/1307>.
 - P. N. L. Pavani, et al. published a paper on "Modeling of Nanolubricant-Assisted Machining Process by using Multiple Regression Analysis." Journal of Nanomaterials 2023, Article ID 3669399, pp. 1-12, ISSN : 1687-4129, Scopus indexed <https://doi.org/10.1155/2023/3669399>.
 - Mr. B.P.R.V.S.Priyatham attended 5 days FDP on "Future Developments in Civil Engineering" conducted by Anand International College of Engineering, Jaipur between 06-02-2023 to 10-02-2023.
 - Mr. K. Naga Rajesh attended a 5 days FDP on "Future Developments in Civil Engineering" conducted by Anand International College of Engineering, Jaipur between 06-02-2023 to 10-02-2023.
 - Dr. R. Cristin from CSE attended FDP on "Current trends in Artificial Intelligence and Engineering Applications in the area of Machine Learning and Deep Learning" conducted by "JNTU-GV College of Engineering Vizianagaram" from 06th February to 10th February 2023.
 - M Sravani from CSE attended FDP on "Machine Learning in Big Data Analytics, Principles, Techniques and Challenges" conducted by "NARSIMHA REDDY ENGINEERING COLLEGE" from 13th February to 18th February 2023".
 - Mrs A Bhavani from CSE attended FDP on "Pedagogical Excellence in ELT" conducted by Kumaraguru College of Liberal Arts and Science, Coimbatore, Tamil Nadu from 13-17 February, 2023.
 - Dr. B. Anil Kumar, Dr. P. Ravi Kumar, Smt. P. Revathi, from ECE Mr. Hari Krishna Marrapu(IT) attended a Workshop on "Current Trends in Artificial Intelligence and Engineering Applications in The Area of Machine Learning and Deep Learning" on 2/6/2023 to 2/10/2023 (5 days) at JNTUGV, Vizianagaram.
 - Prof. P. Kanchanmala attended 5 days online FDP on Universal Human Values organized by AICTE from 20-2-2023 to 24-2-2023.

Workshops/Conferences

Attended:

- Ashutosh Choudhary(IT), Mrs. Suniti Purbey(CSE) attended 5 –days STTP approved by ISTE On "Emerging Technological Advancements and Practical Applications of Data Science" Organised by Department of Information Technology held from 16/01/2023 to 20/01/2023 , SKN Sinhgad Institute Technology & Science, Lonavala

Co-Curricular Activities:

- The 15th edition of STEPCONE 2023 was organized on 24th & 25th January 2023. Around 330+ participants from 33 different colleges from five states participated and 2800+ internal students participated in various events.



- GMRIT ACMW student chapter represented "ACM India Student and Professional Chapter Summit 2023" at IISER(PUNE) on 21-January-2023.



- GMRIT ACMW conducted the events like Thrills & Chills, Code Mantra 4 in the months of January and February.



- ISTE conducted the events like Codethon, IntroPrep for CSE.



- Two girl students Ms.P. Avyakta and Ms. D.Shriya participated in All India Inter University Ball Badminton (W) Tournament held at B.S. Abdur Rahman Crescent Institute of Science & Technology, Vandalur on 27th to 30th January 2023.

- Following are the winners in Jntuk Weight Lifting, Power Lifting(M&W), Best Physique(M) Selection Trails Cum Inter Collegiate Tournament from 7th to 8th January 2023 held at GMRIT: Secured 5 Gold,3 Silver and 1 Bronze medals under Power Lifting (Men); Secured 5 Gold ,7 Silver and 1 Bronze medals under Power Lifting (Women); Secured 2 Silver and 1 Bronze medals under Weight Lifting (Men); 3 Gold ,1 Silver and 1 Bronze medals under weight Lifting (Women); Got 1st 2nd & 3rd place under Best Physique (Men) and overall team championship.
- Civil Services Aspirants Club conducted UPSC Essay Writing Techniques by Dr R K Dash.
- Mr. Ch. Ganeswara Rao & Mr. G. Gowtham represented JNTUK in All India Inter University Power Lifting Championship during 21st to 26th February 2023 at Punjab.
- CSI Student Chapter conducted a Bit Manipulation Event on 09-02-2023.



- Google Developers Club conducted Android star appthon and Flutter Workshop.
- NSS unit conducted National Girl Child Day on 24th January 2023.
- Team ADIRA won prize in the low weight category and Team ASTHRA won in the aesthetics category of vehicle design from the Mechanical Department in the GoKarting Championship 2023 event organized during the STEPCONE 2023 from 24th -25th January 2023.

- Third year students got first prize in Project Design Contest at GVP college of Engineering, Vishakhapatnam on 25th February”2023.
- The ISTE conducted events like "Fun with Circuits, Technical quiz, Resume writing, Battle with Brains, in the month of January and February.



- A Team of three students from Civil Engineering participated in AFOSEC-23, VR Siddhartha College of Engineering and won a cash prize of Rs 11000 in various events.



- 35 Number of Civil students attended a technical event “Pop the Question” on 01-Feb-2023, conducted by GMR Institute of Technology in association with Indian Society for Technical Education (ISTE).
- Mr Satyanarayana, Chairman, APEPDCL Palakonda Division, AP, India delivered guest lecture on “Consumer Awareness On Problems

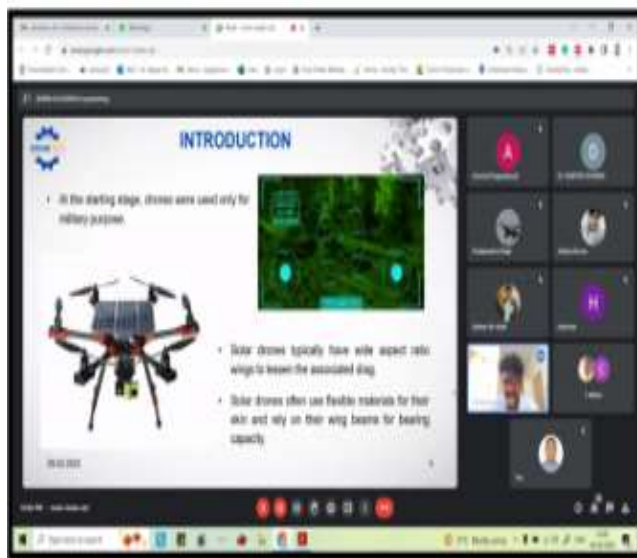
On Electricity Consumption” to III Year EEE students on 15-02-2023.



- 14 students from the department of Civil attended a technical event “Panel Discussion” on 15-Feb-2023, conducted by GMR Institute of Technology in association with Indian Society for Technical Education (ISTE).
- D.Jagan, B.Dhana Lakshmi, B.Jhanavi of third year ECE students got first prize in Project Design Contest at GVP college of Engineering, Vishakhapatnam on 25th February”2023.
- Mr. J Ravi Teja, 21341A0562, CSE A got 2nd Prize in JNTUK Intercollegiate organized at GMRIT during Jan 7-8, 2023.
- G Narayana Rao & Team Final CSE bagged first prize in Webathon Coding event organized by Stepcone 2023
- P Charishma & Team Final CSE bagged first prize in Codemania & Codigo Coding events organized by Stepcone 2023.
- Mr. Kella Balaji, 21341A4222, CSE - AIML got 3rd Prize in JNTUK Intercollegiate organized at GMRIT during Jan 7-8, 2023.
- G Gowtham (III Year Civil Engg) & Ch Ganeswara Rao (III Year EEE) selected for University Level in Power Lifting Competition and to participate in national level competition at Guru Kashi University, Punjab.



- B. Sai Suresh of 4th year mechanical has presented technical paper entitled A short-term review on self-charging drone for different applications in the ICRAME 2023 4th International Conference on Recent Advancements in Mechanical Engineering at NIT Silchar, Assam India from 03-05 February 2023.



Training and Placement:

- As on 28.02.2022, total 65 companies visited for 2022-23 outgoing batch: 414 students were placed with 572 offers with a maximum CTC of Rs. 11.00 Lakhs and an average CTC of Rs. 4.87 Lakhs

- Branch wise and Company wise Placements - 2022-23 Batch for GMRIT as on 28.02.2023

Branch	Total Eligible	Offers	Placements
CE	93	31	26
CHE	19	08	7
CSE	183	205	129
ECE	165	133	97
EEE	94	45	39
IT	116	91	68
ME	138	59	47
Total	808	571	413

- Guest Lecture is organized for Third CSE students on 7th January 2023. Resource Person: Richard King Chaitragadda, TCS.
- Milestone 4 of Wipro Talent Nxt is cleared by 221 from 310 Students of CSE, IT, ECE and EEE.
- 23 Students of 2024 Pass outs had been nominated themselves for Juniper Courses.
- Interaction session conducted by Mr. Richard King Chatragadda - Relation Ship Manager – TCS, on 7th Jan, 2023 for B.Tech final year Students.
- Guest session on Leadership conducted by Mr. Gopi Santhanam - Executive Vice President on 20th Jan 2023 for B.Tech final year Students.
- Guest session on Demonstration of Infosys Springboard conducted by Mr. - Mr. Satyanarayana Murthy, Principal Consultant on 23rd Feb 2023 for B.Tech IInd year Students.
- Guest Lecture on Career Opportunities in Core Engineering conducted by Mr. VKT Koteswara Babu, MD, Visakha Projects on 20th Feb 2023 for B Tech IIIrd year Core branch students.
- Webinar on Career Guidance for Higher Education conducted by Mr. Bharath Karra– Sr. Manager, Business Development, ETS-INDIA, on 16th Feb 2023 for B.Tech IIIrd year Students.