ELECTRON EDGE

July-December

2024 Volume 6 Issue 2



Bhoj Reddy Engineering College for Women

Department of Electronics and Communication Engineering









CONTACT US:



040-2453-1725/7282



principal@brecw.ac.in



Vinay nagar, IS Sadan Crossroads, Saidabad, Hyderabad 50059, Telangana. www.brecw.ac.in



VISION AND MISSION	2
INDUSTRIAL VISIT	3-5
NAAC A GRADE ACHIEVEMENT	6-7
INDEPENDENCE DAY CELEBRATIONS	8
SMART INDIA HACKATHON	9-10
FRESHERS' DAY	11
ALL INDIA WOMEN ACADEMICIANS CONFERENCE	12
DANDIYA CELEBRATIONS	13
WOMEN SAFETY AWARENESS PROGRAM	14-15
WORKSHOP	16-17
GUEST LECTURE	18-19
MERIT AND ATTENDANCE AWARDS	20
VOLUNTARY BLOOD DONATION CAMP	21
ANNUAL SPORTS AND GAMES MEET	22
GUEST LECTURE	23
ALUMNAE MEET	24

VISION

ECE department envisions developing technically competent and meritorious women engineers with a keen sense of social responsibility.



MISSION

- To provide a challenging and value-based education, enriching knowledge of young engineers in the field of Electronics and Communication Engineering.
- To strive for the intellectual and personal development of young women to build a healthy society by improving the quality of life through the application of Electronics.
- To inculcate self-confidence, teamwork, leadership, and entrepreneurship in students through curricular, co-curricular and extracurricular activities.
- To develop adaptable thinking and the ability to apply the techniques of communication innovatively in a realistic environment for the current and future technological requirements.

INDUSTRIAL VISIT

Exploring Telecommunications Excellence: A Visit to Bharat Sanchar Nigam Limited (BSNL)

The ECE Department organized a three-day industrial visit to Bharat Sanchar Nigam Limited (BSNL), Erragadda, Hyderabad.

S No	Class & Section	Date	Time	
1	III ECE A	08.07.2024	08:30 to 16:30	
2	III ECE B	09.07.2024 08:30 to 16:30		
3	III ECE C	10.07.2024	08:30 to 16:30	



Connecting Knowledge with Practice - BSNL Visit

An Industrial visit to Regional Telecom Training Center (RTTC), Bharat Sanchar Nigam Limited (BSNL) was organized by the ECE department of Bhoj Reddy Engineering College for Women. The journey to RTTC was smooth and efficient. Upon reaching, we were warmly received by the staff and smooth coordination set a positive tone for the entire visit, were given a brief introduction to the company and its operations.

We then learned about the various components of telecom infrastructure, such as cables, wires, towers, routers, switches, satellites, and other equipment used to transmit and receive data, voice, and video communication. The labs particularly captivated the students, offering a glimpse into ongoing projects and research initiatives focused on developing new and improved products and solutions.





Demonstration of various stages in telephone Exchange by RTTC faculty

The accompanying staff members gave detailed explanations of the processes, answered questions, and provided valuable industry insights. Initially, they explained the three key communication technologies: PSTN, GSM, and broadband, each using different mediums and technologies. The interaction with the team deepened the students' understanding of the critical role of continuous innovation in the field of engineering. The Electronic Exchange, which includes embedded cords, interfaces with the customer (receiver). All copper cables, the Electronic Exchange, and other communication devices are connected to the Main Distribution Frame (MDF).





During the Explanation by RTTC faculty



From classrooms to telecom corridors – A day to remember!





Battery and power connections to the equipment being explained at Infra lab





The visit concluded with a token of appreciation presented by the college to the BSNL representatives. The industrial visit to BSNL provided students with a comprehensive understanding of the company's operations, advanced technologies, and commitment to excellence. Witnessing firsthand the various departments, production units, research labs, and testing facilities proved to be an invaluable learning experience. This visit has undoubtedly inspired and motivated the students to excel in their chosen field of engineering. Special thanks go to Mr. Srinath, Manager, and the entire team at RTTC, BSNL, for their exceptional hospitality and for making this visit memorable.

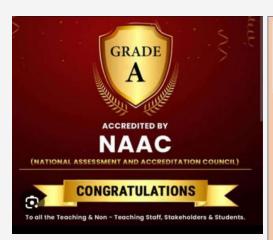


Thank you, BSNL, for the insights!

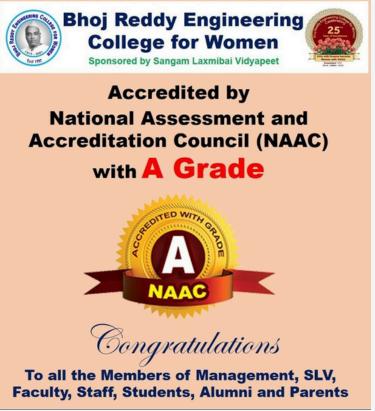
Proud to Achieve NAAC A Grade ~A Journey to Excellence

Bhoj Reddy Engineering College for Women has been accredited with a NAAC A Grade, a prestigious recognition that reflects the institution's commitment to academic excellence, infrastructure development, and quality education. The National Assessment and Accreditation Council (NAAC) evaluates higher education institutions based on various parameters such as teaching-learning outcomes, research, infrastructure, governance, and student-centric initiatives. Achieving the A Grade signifies that the college consistently meets high standards in all these areas, fostering an environment of holistic growth and innovation for students.

24 & 25 JULY



"NAAC A Grade is not just a recognition, but a celebration of hard work, vision, and a commitment to shaping the future"



This accreditation highlights the college's dedicated efforts to provide quality education to empower women in the field of engineering and technology. It serves as a testament to the institution's emphasis on modern teaching methodologies, well-equipped laboratories, and a vibrant campus culture. The **NAAC A Grade** not only strengthens the college's reputation but also motivates students, faculty, and stakeholders to strive for continuous improvement, aligning with the mission of building future-ready professionals.





Proud to Shine with NAAC A Grade



The achievement of the **NAAC A Grade** is a result of the collective hard work, dedication, and commitment of both the students and staff of our college. The faculty's relentless efforts to provide quality education, engage in innovative teaching practices, and foster a culture of research and development have been instrumental in reaching this milestone. Equally, the students' enthusiasm for learning, active participation in academic and co-curricular activities, and their drive for excellence have played a crucial role. This recognition reflects the unity, perseverance, and shared vision of the entire college community in building an institution that consistently strives for academic brilliance and holistic growth.



Independence Day is a significant occasion that marks the anniversary of a nation's freedom from colonial rule or oppression. Celebrated with great enthusiasm and patriotic fervor, this day is a reminder of the struggles and sacrifices made by countless individuals to secure liberty and sovereignty. It is a time to honor the history and heritage of the nation, reflect on the values of freedom and democracy, and recognise the progress made since independence. Flag hoisting ceremonies, cultural programmes, speeches, and community activities are commonly organised to commemorate this day. Independence Day not only fosters a sense of national pride and unity but also inspires citizens to contribute to the ongoing development

and prosperity of their country.





Celebrating freedom, unity, and pride!

Our college celebrated Independence Day on **15th August**, **2024** at 9:30 A.M. With the completion of 77 years of Independence, India will be celebrating its 78th Independence Day 2024. While it is widely known that this independence is a gift of our ancestors' courage and struggle, it cannot be neglected that education has played an important role in the Indian Freedom Struggle. Students shall know about the impact of education on the freedom struggle and its eventual growth changing the lives of all the young people of the country. In the mid-18th century when the Britishers entered India with a purpose to rule, with trade and commerce, India was not prepared enough to fight back for its rights.

Since Independence, India has worked tirelessly to educate the young and to motivate the elderly to send their children to schools and colleges. India has also incorporated the "Right to Education" in the Indian Constitution under Article 21A, adding "free and compulsory" for the children of the age of six to fourteen years. So, as the next generation of the country, each and every student should be aware and ready to grow with the help of education and take the stakes of the country as one of the super nations in the world.

SMART INDIA HACKATHON

On September 5, 2024, a competition was organized in the Seminar Hall 402, West Block, to select teams for nomination to the prestigious Smart India Hackathon. The event provided a platform for students to showcase their innovative ideas, problem-solving skills, and technical expertise. Teams competed by presenting their creative solutions to real-world problems, demonstrating their potential to contribute to the national-level hackathon. The competition fostered a spirit of innovation and collaboration, with selected students earning the opportunity to represent the college in the Smart India Hackathon, a significant milestone in their academic journey.

DATE: September 5th,

2024

VENUE: Seminar Hall (402) West Block

TIMINGS: 10:00 hrs to 4:30 hrs

Each team worked collaboratively, demonstrating exceptional problem-solving skills and creativity. The competition not only allowed students to showcase their technical and analytical abilities but also fostered a spirit of teamwork, communication, and critical thinking. The event concluded with the selection of the most promising teams, who were nominated for the Smart India Hackathon. This competition was a vital step in preparing students for a national-level challenge, encouraging them to push the boundaries of innovation and technology.



Be part of the Smart India Hackathon selection



Ideas in motion—students presenting at the Smart India Hackathon!

The event witnessed a high level of innovation, with students showcasing impressive ideas and solutions to real-world challenges. Students from various disciplines participated, presenting their innovative solutions to a range of real-world challenges. The event was marked by the active involvement of faculty members, who provided valuable mentorship and support to the participants throughout the process. The support and guidance provided by the faculty members played a crucial role in ensuring the smooth conduct of the competition. The success of the event highlighted the talent and creativity of the students, motivating them to further enhance their skills as they prepared for the Smart India Hackathon. It was a great collaborative effort that showcased the strength of teamwork and academic excellence.

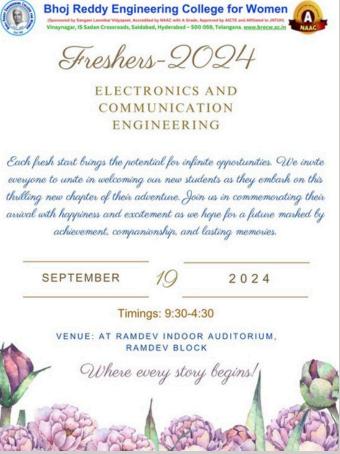
FRESHERS' DAY



"Freshers, your journey has just begun—let's make it extraordinary!"

Freshers' Day was celebrated at our college on September 19, 2024, with great enthusiasm and energy. The event marked a warm welcome to the new batch of students, fostering a sense of belonging and camaraderie. The day featured various activities, including cultural performances, fun games, and an introduction to college traditions. Senior students showcased their talents through engaging performances, while the freshers enthusiastically participated in competitions, making the event lively and memorable. The seniors extended their guidance and shared experiences, creating a supportive environment for the newcomers. The day concluded with a DJ session, where everyone hit the dance floor, making it a memorable start to the freshers' college journey.It was a wonderful platform for the newcomers to connect with their peers and faculty, setting a positive tone for their academic journey.

19th September 2024



Freshers' Invitation

ENVISIONING NEW BHARATH

All India Women Academicians Conference

On September 21, Osmania University hosted the All-India Women Academicians' Conference, focusing on innovations and technical breakthroughs to position India as a global leader. Organized by the Akhil Bhartiya Rashtriya Shaikshik Mahasangh (ABRSM) in collaboration with the Indian Council of Social Science Research, the conference featured paper presentations on topics such as the role of women academics in building a "Viksith Bharat," women in STEM, and women's leadership in higher education and policymaking. Renowned author and philanthropist Sudha Murthy was the guest of honor, delivering an inspiring keynote address on the significance of women's contributions in shaping the nation's future. Faculty members from our college also participated in the event, engaging in insightful discussions and contributing to the conference's vision of empowering women in academia and beyond.

The conference aimed to celebrate and promote the contributions of women in academia, fostering a platform for sharing knowledge, experiences, and strategies for overcoming challenges in the academic field. Through discussions, workshops, and keynote addresses, the conference highlighted the importance of women's empowerment in education and emphasized their critical role in shaping future generations.

"Education is the key that unlocks the golden door for a woman's empowerment."

~SUDHA MURTHY



A great experience for our college staff at the conference

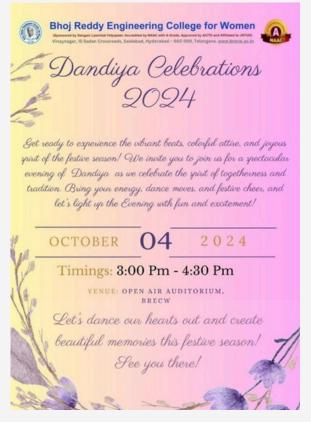


DANDIYA CELEBRATIONS



The Dandiya event held on October 4, 2024, at our college was a grand celebration filled with music, dance, and festive fervor. The event featured lively beats of traditional Gujarati music, creating an electrifying atmosphere where students and faculty came together to perform Garba and Dandiya Raas. Participants adorned vibrant, traditional attire, adding a burst of color and cultural authenticity to the occasion. The event also included competitions, with prizes awarded for the best dancers and creative costumes. encouraging most enthusiasm and creativity. It served as a wonderful platform for students to unwind, socialize, and embrace the spirit of Navratri, strengthening bonds within the college community.

"Dance to the rhythm of joy, for Dandiya is where hearts unite."



Join us for the celebrations



Dancing hearts, festive beats, unforgettable moments



Empowerment in Action: SHE Teams Initiative

On October 19, 2024, our college's Women Protection and Anti-Sexual Harassment Cell Women Safety Awareness organized Program. The event aimed to empower women by educating them about safety measures and legal rights. Prominent speakers shared insights on fostering a secure environment for all. The program also highlighted the importance of collective efforts to combat harassment and ensure safety on campus.

SHE Teams is a special initiative aimed at ensuring the safety and security of women in public and private spaces. SHE Teams also focused on creating a safer environment through counseling, legal aid, and community engagement. Their proactive approach emphasizes prevention, protection, and empowerment, encouraging everyone to join hands in building a society where women feel safe and respected.

SPEAKER:



Ms. B Dhana Lakshmi, Inspector, SHE Teams, Hyderabad



Ms. D Prasanna Lakshmi, Assistant Commissioner of Police,SHE Teams,Hyderabad



Strong women, stronger world



Together, we stand for awareness, safety, and change





Honoring those who inspire us to create a better tomorrow

PROFILE

Asst. Commissioner of Police, CAR Headquarters, Hyderabad.

 Asst. Commissioner of Police, SHE Teams, WSW and Bharosa.

EDUCATION

• B.Tech from Bhojreddy Engineering College.

ACHIEVEMENTS

- Awarded with Seva Pathakam in the year 2021.
- Nominated for Union Home Minister Medal.

D. Prasanna Lakshmi



A small gesture to thank a big contribution

DATE: 19th Oct, 2024



A picture of unity, a purpose of progress



Internet of Things with hands-on Arduino Uno and Raspberry Pi

The Bhoj Reddy Engineering College for Women has organized a three-day workshop on "Internet of Things with hands-on Arduino Uno and Raspberry Pi" for III B Tech ECE students during **12-14 November 2024.** The workshop had begun with Inaugural Session at 09:30 Hrs and then Theory Session at 10:00 Hrs in the Seminar Hall (WB 402) on 12 November 2024. This workshop has conducted by M/s Physitech Consultancy services private limited, Hyderabad under Internal Quality Assurance Cell (IQAC). The workshop has scheduled between 09:30-16:30 Hrs. On 13 & 14 November 2024, Hands-on Session was conducted in Computer Lab-I (NB 103).



During the Inaugural Session

In today's interconnected world, the Internet of Things (IoT) is revolutionizing the way we live and work. This comprehensive workshop introduces participants to the fundamentals of IoT and provides hands-on experience with Arduino Uno and Raspberry Pi.

Through interactive sessions and projects, we'll explore IoT concepts and applications, programming, project development, sensor integration, and communication protocols. Hands-on projects include building smart home automation systems, creating wearable devices, and developing weather monitoring stations. By the end of the workshop, we'll take away a solid understanding of IoT concepts and technologies, hands-on experience with Arduino Uno and Raspberry Pi, and skills in programming, sensor integration, and project development.





During the Hands-on Session

During the Theory Session

Bhoj Reddy Engineering College for Women remains committed to organizing such workshops, fostering a learning environment that prepares students for the challenges and opportunities presented by emerging technologies. The college expresses its sincere appreciation to M/s Physitech Consultancy services private limited, Hyderabad under Internal Quality Assurance Cell (IQAC) and the distinguished resource persons for their invaluable contributions to the success of the workshop.



During the Valedictory Session

Guest Lecture +

The ECE Department has organized a Guest Lecture on "Machine Learning Fundamentals: A Gateway to AI Innovation" for students on 20 November 2024, Guest Lecture was scheduled from 10:30 to 12:30 Hrs.

Inaugural function was attended by the Speaker Dr. L. NIRMALA DEVI, Professor of Electronics and Communication Engineering University College of Engineering, Osmania University, ECE staff and students.



VENUE: Indoor Auditorium, Ramdev Block

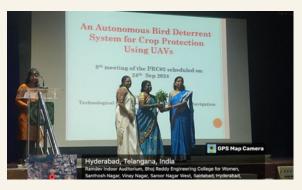
SCHEDULE:

	S.no	Time (Hrs.)	Speaker
	1	10.00-10.05	Welcome note by Kajja Jacinth emerald, III ECE A
	2	10.10-10.15	Address by Principal Dr J Madhavan
	3	10:15-10:20	Address by Vice-Principal Mr. G Dayakar Reddy
	4	10:25-10:30	Address by HOD-ECE, Ms. S Manjula, Associate Professor, ECE
	5	10:30-12:30	Keynote address by Speaker Dr. L. NIRMALA DEVI, IEEE, FIEI, FIETE
			Professor of Electronics and Communication Engineering
ĺ	6	12:30	Vote of Thanks by T Sri Mahi, III ECE B

Speaker:



Dr. L. NIRMALA DEVI,
IEEE, FIEI, FIETE
Professor of Electronics and
Communication Engineering
University College of
Engineering, Osmania
University



Honoring expertise and innovation in AI.

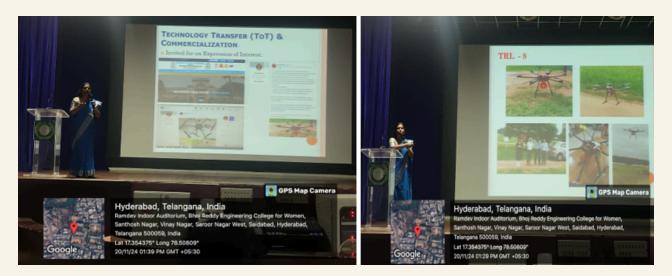
She has teaching experience of more than 23 Years in subjects like, Signals and Systems, Digital Signal Processing, Adaptive Signal Processing, Neural Networks, AI/ML, IOT and Wireless Communications, Wireless Sensor Network, Data and Computer Communications, Analog Communication, Digital Communication, and Research Methodology for Engineering. Her research interests include Ad-hoc networks, wireless communication, wireless sensor networks, IoT and Signal Processing Machine Learning and AI. She has completed various research projects sponsored by, Ministry of Electronics and Information Technology (MeiTY), Government of India, New Delhi, Department of Science & Technology (DST) and UGC, Telangana State Council of Science and Technology(TSCOST). Currently she is working on a research project in collaboration with Technology Innovation Hub(TIHAN), IIT Hyderabad.

"Machine Learning Fundamentals: A Gateway to AI Innovation"



Indoor Auditorium (Ramdev Block)

On the 20 November 2024, the Department of ECE at Bhoj Reddy Engineering College for Women hosted Guest Lecture on "Machine Learning Fundamentals: A Gateway to AI Innovation" for students on 20 November 2024" The speaker Dr. L. NIRMALA DEVI,IEEE, FIEI, FIETE Professor of Electronics and Communication Engineering University College of Engineering, Osmania University She has teaching experience of more than 23 Years in subjects like, Signals and Systems, Digital Signal Processing, Adaptive Signal Processing, Neural Networks, AI/ML, IOT and Wireless Communications, Wireless Sensor Network, Data and Computer Communications, Analog Communication, Digital Communication, and Research Methodology for Engineering. Her research interests include Ad-hoc networks, wireless communication, wireless sensor networks, IoT and Signal Processing Machine Learning and AI. She has completed various research projects sponsored by, Ministry of Electronics and Information Technology (MeiTY), Government of India, New Delhi, Department of Science & Technology (DST) and UGC, Telangana State Council of Science and Technology(TSCOST). Currently she is working on a research project in collaboration with Technology Innovation Hub(TIHAN), IIT Hyderabad.



During the lecture of speaker Dr. L. NIRMALA DEVI Garu

MERIT & ATTENDANCE AWARDS



On 22nd November 2024, our college conducted the Merit and Attendance Award function, recognizing students for their exceptional academic performance and consistent attendance. The event celebrated the hard work, dedication, and discipline of students who excelled in their studies and maintained excellent attendance records throughout the academic year. Awards were presented to the top performers, honoring their achievements and motivating others to strive for excellence. The ceremony not only acknowledged academic success but also emphasized the importance of regularity and commitment in both academics and overall personal development.



The event featured speeches from faculty and college leaders. highlighting the importance discipline, perseverance, and academic excellence in shaping the future of students. It was a moment of pride for the awardees, their families, and the entire college community, as the event encouraged others to aim for higher standards and embrace a culture of learning and consistency. ceremony concluded with a sense of and motivation inspiration, reinforcing the values of hard work and commitment.

Celebrating excellence with every certificate and prize!

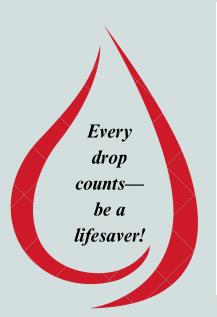


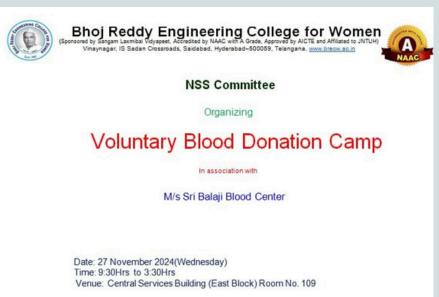
Voluntary Blood Donation Camp by NSS Committee

The NSS Committee is organizing a Voluntary Blood Donation Camp in collaboration with M/s Sri Balaji Blood Centre for all students and staff.

Date: 27 November 2024 **Time:** 9:30Hrs to 3:30Hrs

Yenue: Central Services Building (Sports – East Block)





Your One Donation Can Save Multiple Lives - Blood Donation Camp





A small act with a big impact

The Voluntary Blood Donation Camp, organized successfully by the NSS Committee in collaboration with M/s Sri Balaji Blood Centre, marked a significant achievement for our college. The event witnessed enthusiastic participation from both staff and students, showcasing their commitment to this noble cause. Through their collective efforts, the camp became a platform for saving lives and spreading awareness about the importance of blood donation. This successful initiative reflects the spirit of compassion and social responsibility within our college community.

ANNUAL SPORTS AND GAMES MEET



30th NOVEMBER & 2nd DECEMBER 2024

Our college hosted a two-day inter-section annual students' sports and games meet on November 30 and December 2, 2024, for all students. The event was a celebration of athleticism and teamwork, bringing together students from different sections to compete in various sports and games. The meet included a variety of activities, fostering both healthy competition and camaraderie among participants. It was an exciting opportunity for students to showcase their sporting talents while enjoying a break from academics. The event was resounding success, with enthusiastic participation and a spirit of unity.

"In sports, it's not about the winning; it's about the journey"









Game on!

The sports meet not only highlighted the importance of physical activity but also fostered a sense of teamwork and camaraderie among students. With strong support from both participants and spectators, the event was a great showcase of talent, energy, and school spirit.

GUEST LECTURE

12th December

On December 12, 2024, the ECE department of our college organized a guest lecture on "Next-Generation Multiple Access for 6G Networks," under the Internal Quality Assurance Cell. The focused on the advancements communication technologies, specifically the evolution from 5G to 6G, and the potential of multiple access techniques in shaping the future of wireless networks. The expert speaker shared insights into the cutting-edge research and innovations driving 6G development, highlighting its applications, challenges, and opportunities. The session was informative and engaging, providing students and faculty with a deeper understanding of the future wireless communication.

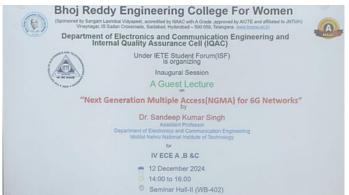
SPEAKER:



Dr.Sandeep Kumar Singh
Dept of ECE,
Motilal Nehru National Institute of
Technology, Prayagari, India



The guest lecture by Dr. Sandeep Kumar Singh from the ECE department of Motilal Nehru National Institute of Technology was a valuable experience for all attendees. In conclusion, Dr. Singh emphasized the critical role of next-generation multiple access techniques in the development of 6G networks. These advancements are essential to meet the growing demand for faster, more reliable, and seamless wireless communication. Understanding the significance of 6G is crucial for both students and professionals in the field, as it opens up new opportunities in areas such as smart cities, autonomous vehicles, and immersive technologies. The topic is of great importance as it lays the foundation for the future of global communication systems, making it essential for researchers and engineers to stay informed and engaged with these developments.





Great session, great memories!

Alumnae Meet



Our college conducted the alumnae meet, "Milan-2024," on December 28, bringing together students to reconnect with their peers and faculty. The event served as a platform for alumnae to share their professional journeys. Distinguished alumnae addressed the gathering, inspiring current students with their stories and success industry experiences. The event featured interactive sessions. networking opportunities, and cultural performances, fostering a strong bond between past and present students. Faculty members and the management emphasized the importance of alumni engagement in shaping the institution's "Milan-2024" future, making memorable and impactful reunion.

"Reunite, Relive, Rejoice!"

