

DEPARTMENT VISION

To produce globally competitive and socially responsible engineering graduates and to bring out quality research and education, generating knowledge in the frontier areas of Electronics and Communication Engineering

DEPARTMENT MISSION

1. To achieve self-sufficiency on all fronts to ensure qualitative Teaching-Learning practices.
2. To provide quality education, student-centred Teaching-Learning processes and state of art infrastructure for professional aspirants hailing from both rural and urban areas.
3. To impart technical education that encourages independent thinking, developing strong domain knowledge, contemporary skills and attitude towards holistic growth of young minds.
4. Responsiveness to both local and global industry needs and creating opportunities through incubation and implementation of innovative programs
5. To serve the community as disciplined responsible citizens in a rapidly changing and expanding global community.
6. Evolving this organization into a centre of academic and research excellence.

DIVING DEEP INTO THE WORLDS OF AUGMENTED REALITY AND VIRTUAL REALITY

Augmented reality (AR) and virtual reality (VR) are emerging technologies that blend the real and digital worlds. AR adds digital information to the real world, while VR creates an interactive, multi-sensory experience. AR uses a real-world setting to add digital elements to a live view. For example, AR can add computer-generated graphics, GPS data, audio, and video to enhance the perception of reality. AR can be accessed with a smartphone. VR is completely virtual and replaces a real-life environment with a simulated one. VR uses headsets, controllers, and sensors to create an interactive experience. In VR, the user's perception of reality is completely based on virtual information. Some benefits of immersive learning with AR and VR include: risk reduction, reduced time taken to train staff, increased contextualization, cost savings, emotional responses, memory retention.



AR: Enhancing the World Around Us:

- **Beyond the smartphone:** AR is transcending the limitations of smartphones, venturing into smart glasses and other wearables, seamlessly integrating digital elements into your physical environment.
- **Revolutionizing industries:** AR is transforming various sectors, from healthcare, where it aids in complex surgeries, to manufacturing, where it facilitates remote maintenance and training.

VR: Transporting You to New Realities:

- **Pushing the boundaries of storytelling:** VR is redefining how we experience narratives, transporting us to the heart of captivating stories and fostering deeper emotional connections.
- **The future of fitness:** VR is making waves in the fitness world, offering immersive workout experiences that gamify exercise and boost motivation.

Merging Realities: The Future of XR

The lines between AR and VR are gradually blurring, paving the way for Extended Reality (XR). Imagine interacting with virtual objects within your real environment or seamlessly transitioning between physical and virtual spaces. This is the exciting future that XR promises.

Challenges and the Road Ahead:

Despite the immense potential, AR and VR still face challenges, such as accessibility, privacy concerns, and ensuring responsible development. However, with continued advancements and a focus on ethical considerations, these technologies hold the power to revolutionize how we interact with the world around us.

Quote: "Believe the unbelievable."