

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.

HARNESSING THE IoT POTENTIAL AND SECURING THE FUTURE

NextGen broadcasting isn't just about sharper pictures and better sound. It's about transforming the entire communication landscape with technologies like ATSC (Advance Television Systems Committee) 3.0. This opens doors for a diverse range of possibilities, including:

Enhanced interactivity: Imagine receiving targeted advertising based on your preferences or participating in live polls during shows. **Immersive experiences:** NextGen can deliver 3D content and augmented reality overlays, enriching the viewing experience. **Ubiquitous connectivity:** Improved broadcasting reach and efficiency can enable IoT devices in remote areas to seamlessly connect.

IoT Integration: Expanding the Ecosystem

NextGen seamlessly integrates with IoT, creating a powerful synergy: **Smart homes and cities:** Imagine sensors in your home communicating with broadcasting networks to optimize energy usage or traffic flow. **Connected cars:** NextGen can deliver real-time traffic updates and safety warnings directly to vehicles. **Industrial IoT:** Factories can leverage broadcasting networks for secure and reliable communication between machines and sensors.

The Cybersecurity Challenge: Securing the Connected Future while the potential is boundless, so are the security concerns

Complex ecosystems: Integrating different technologies poses challenges in maintaining security protocols across the board.

Data privacy: The vast amount of data generated by IoT devices raises concerns about unauthorized access and misuse.

Increased attack surface: With more devices connected, there are more entry points for hacker The combination of NextGen broadcasting and IoT has the potential to revolutionize our lives. But securing this connected future requires collaboration between developers, broadcasters, cybersecurity experts, and policymakers. By working together, we can unlock the vast potential of NextGen while ensuring a safe and secure digital landscape for everyone.

