

What's New

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Vision

To become a leading Centre of Excellence in higher learning and research, and to facilitate the transformation of students into good human beings and competent professionals recognized nationally and globally.

Mission

- Focus on assimilation, generation and dissemination of knowledge in the field of Electronics and Communication Engineering.
- Practice and inculcate high standards of professional ethics, transparency and accountability.
- Provide an academic environment that fosters leadership, research aptitude and promotes life-long learning.
- · Increase the visibility of academic programs globally and attract talent at all levels.

Quantum Computing

The Future is Now (Almost)

In earliest year of 2022, significant strides were made in this technology. 2 Researchers explored its potential in solving complex problems like drug discovery and material science. 3 Quantum key distribution (QKD) emerged as a promising solution for ultra-secure communication, offering unbreakable encryption keys. While still in its early stages, quantum computing holds the potential to reshape industries and address global challenges. 4

In 2022, quantum computing advanced with IBM's 127-qubit Eagle and progress in qubit fidelity. Hybrid algorithms like VQE gained traction, aiding optimization, chemistry, and machine learning. Tools like Qiskit eased programming, while industries explored logistics, drug discovery, and AI. Challenges included error correction and scalability, with global funding accelerating development.





3 VEARS DRDO Funded

Feasibility
Study and
Demonstration

Optical Sensor Development for Water Quality Monitoring

Prof. Mainuddin and Prof. M.T. Beg are leading a DRDO-funded project titled "Feasibility study and demonstration of optical sensors for water pollutants". The project was sanctioned Rs. 93,75,383 and has a duration of 3 years. In the current year, Rs. 24,16,600 has been received.

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