

Department of Electronics and Communication Engineering

1. About the Department:

- Electronics and Communication Engineering (ECE) department is well-regarded for its comprehensive curriculum and state-of-the-art facilities. The department offers a Bachelor of Engineering (B.E.) degree program in ECE, accredited by the National Board of Accreditation (NBA).
- **Industry Collaboration:** Department of ECE signed MoU with leading industries like Tessolve Semiconductors, Caliber Interconnect Solutions, Enthu Technologies etc and established strong industry linkage
- **Thrust Areas:** Key area such as Wireless Communication, VLSI Design, Embedded Systems and IoT, RF and Antenna Design

2. Facilities Available for Industry Collaboration

- **Internet of Things Lab:** Fire bird V ARM7 LPC2148 Robot, Spark V Robot
- **Smart Antenna Systems and Measurements Lab:** Anechoic Chamber, Vector Network Analyzers (VNA) Software: CST Microwave Studio Suite
- **PCB Lab:** Software: Eagle version 7.2, Kicad, Altium. Key equipments like Roller Tinning Machine, Oven, Etching Machine and Drilling Machine
- **Embedded Systems Lab:** ARM 7 Embedded Trainer Kit, CORTEX M4 Development Kit, ARM-7 LPC 2148 KIT and PIC Embedded Trainer Kit
- **Digital Systems and Networks Laboratory:** Software: Cadence EDA Tool, Universal FPGA Kit, Xilinx Spartan 3E FPGA Trainer Kit, Altera Cyclone II Board, TMS 320C50 based DSP Trainer Kit (Micro50LC).

3. Consultancy Services

- **Consultancy Areas:** KPR Institute of Engineering and Technology (KPRIET) offers a range of consultancy services to industry partners, leveraging its faculty expertise, state-of-the-art facilities, and strong industry connections. These services are designed to address specific industry needs and provide innovative solutions.
 - ★ **Areas: PCB design**
 - ★ **IoT Solutions**

4. Testing Services

- **Description:** Design, Development and Characterization of Antenna and RF Systems
 - ★ Optimization of Antenna and RF systems, Computational Electromagnetics, Antenna Arrays and RF Devices Characterization

5. Executive Development Programs

- Executive Development Programs are designed to elevate experienced professionals to new heights. These programs focus on honing leadership skills, imparting knowledge of the latest industry trends, and fostering innovation. By equipping executives with strategic thinking, effective communication, and decision-making abilities, these programs empower them to drive organizational growth. Moreover, they provide a platform for networking with industry peers and experts, enabling valuable knowledge exchange and collaboration.
- **Programs Offered:** Insights of AI and Industrial IoT, PCB fabrication and assembly.

6. Research and Development Collaborations

- **Research Focus Areas:** The Industry-Institute Partnership Cell (IIPC) at KPRIET facilitates collaboration between academia and industry, focusing on cutting-edge research and development. Key R&D areas include Artificial Intelligence and Machine Learning, Internet of Things, Cybersecurity, Renewable Energy.
- **Collaboration Opportunities:** The field of Electronics and Communication Engineering offers numerous opportunities for collaborative research and joint projects with industry partners on 5G and beyond 5G technologies, Internet of Things (IoT), Signal processing and VLSI design

7. Achievements and Success Stories

- Signed 6 MoU with leading industries
- Generated revenue of worth Rs.75,00,000 on consultancy / training / testing services