Analog and Digital IC Applications Laboratory

The **Analog and Digital IC Applications Laboratory** provides Electronics and Communication Engineering (ECE) students with practical knowledge of integrated circuits and their applications in electronic system design. The laboratory enables students to understand the operation and implementation of analog and digital ICs through hands-on experiments. Students perform experiments by using operational amplifiers and timers, voltage regulators, comparators, A to D and D to A converters etc They design and analyze circuits such as amplifiers, oscillators, waveform generators, active filters, arithmetic circuits, and sequential logic systems. The laboratory helps students gain proficiency in circuit design, simulation, testing, and performance evaluation using modern electronic instruments and trainer kits. Through practical experimentation, students develop skills in troubleshooting, signal analysis, and system implementation.

This laboratory strengthens their understanding of analog and digital electronics and enhances problem-solving and design capabilities. It serves as a foundation for advanced areas such as VLSI design, embedded systems, digital signal processing, communication systems, and integrated circuit design. Overall, the Analog and Digital IC Applications Laboratory plays a vital role in developing the technical competence and practical skills required for modern Electronics and Communication Engineering applications.



Figure -Analog and Digital IC applications Lab