

**EC8261 CIRCUITS AND DEVICES LABORATORY**

DETAILED SYLLABUS

**OBJECTIVES:**

- To learn the characteristics of basic electronic devices such as Diode, BJT, FET, SCR
- To understand the working of RL, RC and RLC circuits
- To gain hand on experience in Thevinin & Norton theorem, KVL & KCL, and Super Position Theorems

1. Characteristics of PN Junction Diode
2. Zener diode Characteristics & Regulator using Zener diode
3. Common Emitter input-output Characteristics
4. Common Base input-output Characteristics
5. FET Characteristics
6. SCR Characteristics
7. Clipper and Clamper & FWR
8. Verifications of Thevinin & Norton theorem
9. Verifications of KVL & KCL
10. Verifications of Super Position Theorem
11. verifications of maximum power transfer & reciprocity theorem
12. Determination of Resonance Frequency of Series & Parallel RLC Circuits
13. Transient analysis of RL and RC circuits