

CURRICULUM DEVELOPMENT PLAN: Dr. V. Bhasker Raj

GE-IIIrd Semester (2025-2026)

Paper: Introduction to Electronics; UPC: 2224002001;

Credit: 04 (Lecture-02, Prac.-02)

Content	Allocation of Lectures	Month-wise Schedule followed	Tutorial Assignment/ presentation etc
Unit – I: Analog and digital signals, Active and passive electronic components, RC integrator and differentiator (use as low pass and high pass filter): Qualitative analysis and frequency response.	04	September	• Syllabus Overview • Reference Books • Problem-solving
Unit – III: Input and output characteristics of a bipolar junction transistor (BJT) in CB and CE configurations, identifying active, cut-off and saturation regions. Transistor parameters alpha and beta, and relation between them. Application of BJT as a switch and an amplifier in CE configuration (Graphical Analysis)	04	October	• Derivations • Problem-solving • Students' difficulties • Assignments and Tests
Unit – IV: Review of basic and Universal Logic Gates, Binary to decimal and Decimal to binary conversion, binary addition and subtraction using 2's complement, Half and Full Adder, Half and Full Subtractor using NAND Gates.	06	November	• Derivations • Problem-solving • Students' difficulties • Previous year's Question Paper