

VLSI CIRCUIT & DESIGN (BECP-503)

Course Outcomes:

1. The course includes the design of elements in bipolar- and CMOS-based op amps, feedback, power supplies, linear and non-linear applications circuits with the op amp as the basic building block, and transistor circuits for realizing basic digital circuits.
2. This course provides sufficient basic knowledge for the undergraduate to understand the design of op amps and their applications as well as the design of digital circuits.
3. Ability to design and conduct experiments as well as to analyze and interpret data.
4. The ability to design a system, component or process to meet desired needs within realistic constraint

List of Programs:

1. Design of following ckt using appropriate software like VHDL/ FPGA. 1)
3-input NAND gate.
2. Half adder, Full Adder
3. D-Latch, T Flip Flop
4. Serial in-serial out shift register, Bidirectional shift Register
5. 3 Bit synchronous counter