



**Programme Outcomes, Programme Specific Outcomes and Course Outcomes
Bachelor of Computer Application (B.C.A.)**

Sem. II INTRODUCTION TO LOGIC CIRCUIT AND DIGITAL DESIGN : 2101

Programme Outcomes (Pos)

PO1: The course teaches the students about the basic concepts of programming languages and its applications

PO2: This degree course is best option which encompasses the entry point for all streams students to make a career in computers.

PO3: Develop various real time applications using latest technologies and programming languages.

PO4: To identify and define problems.

PO5: Possess strong foundation for their higher studies.

PO6: Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

PSO1: To pursue further studies to get specialization in Computer Science and Applications, business administration

PSO2: To pursue the career in corporate sector can opt for MBA.

PSO3: To Work in the IT sector as programmer, system engineer, software tester, junior programmer, web developer, system administrator, software developer etc.

PSO4: To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Able to perform the conversion among different number systems; Familiar with basic logic gates -- AND, OR & NOT, XOR, XNOR; independently or work in team to build simple logic circuits using basic.
- Understand Boolean algebra and basic properties of Boolean algebra; able to simplify simple Boolean functions by using the basic Boolean properties.
- Able to design simple combinational logics using basic gates. Able to optimize simple logic using Karnaugh maps, understand "don't care".
- Familiar with basic sequential logic components: SR Latch, D Flip-Flop and their usage and able to analyze sequential logic circuits.
- Understand finite state machines (FSM) concept and work in team to do sequence circuit design based FSM and state table using D-FFs.
- Familiar with basic combinational and sequential components used in the typical data path designs: Register, Adders, Shifters, Comparators; Counters, Multiplier, Arithmetic-Logic Units (ALUs), RAM. Able to do simple register-transfer level (RTL) design.
- Able to understand and use one high-level hardware description languages (VHDL or Verilog) to design combinational or sequential circuits.
- Understand that the design process for today's billion-transistor digital systems becomes a more