

# MC602: Logic Circuits and Computer Organization

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Since 2010.

**Prerequisite:** None.

**Description:**

Introduction to basic concepts on logic projects. Logic gates. Simulation of digital circuits. Minimization of logic functions. Karnaugh maps. Combinatorial Circuits. Memory elements: latch, flip-flops, counters. Synthesis of synchronous and asynchronous sequential circuits. Memory organization and hierarchies. Basic processor.

**Programme:**

1. Introduction to basic concepts on logic project
2. Logic gates
3. Simulation of digital circuits
4. Minimization of logic functions
5. Karnaugh maps
6. Combinatorial Circuits
7. Memory elements: latch, flip-flops, counters
8. Synthesis of synchronous and asynchronous sequential circuits
9. Memory organization and hierarchies
10. Basic processor.

**Recommended Literature:**

- I. John F. Wakerly. Digital Design Principles & Practires (Second Edition). Prentice Hall, 1994