

This is a second-year students' laboratory, it is given during the second semester and introduces the students to the basics of electronic circuits using workbench program.

## **LABORATORY OBJECTIVES.**

- 1. Introduce students to the basics of logic gates and their characteristics.
- 2. Teaching the student how to:
  - a. Design of synchronous / asynchronous sequential circuits.
  - b. Design Synchronous Counter.
  - c. Design Special Order Counter.
  - d. Design Special Order Counter.
  - e. Design and Implement a sequence Detector.
  - f. Design Sequence Detector with Counter.
  - g. Design of Sequential Circuits with inputs and output.