

## Faculty of Engineering & Technology Logic Design

## Information:

Course Code: EED220 Level: Undergraduate Course Hours: 3.00- Hours

**Department:** Electrical Power Engineering

Instructor Information :		
Title	Name	Office hours
Lecturer	MOSTAFA MOHAMED SALAHELDIN ABDELKHALEK ELEWA	
Lecturer	MOSTAFA MOHAMED SALAHELDIN ABDELKHALEK ELEWA	
Assistant Lecturer	Mohamed Essam Abd El Aziz Abd El Aal	
Assistant Lecturer	Mohamed Essam Abd El Aziz Abd El Aal	
Assistant Lecturer	SHEROUK SOBHI ABDELSALAM FOUDA	

## **Description:**

Digital systems, binary numbers, and coded number systems. Boolean algebra, canonical and standard forms, and digital logic gates and their integrated circuits. Gate-Level Minimization, and the map method for simplification and implementation. Combinational logic circuits: Analysis procedure, design procedure, binary adder. subtractor, binary multiplier, magnitude comparator, decoders, encoders, and multiplexers. Sequential logic circuits: Latches and Flip-Flops, analysis of clocked sequential circuits, and design procedure. Registers, counters, Memory, memory decoding, and programmable devices. Selected applied design examples with standard integrated circuits (ICs).