Lab #4 – Design of a Full Adder

(For students taking EGC230 this semester)

In this lab you will design a full adder and verify its operation. A full adder has three inputs and two outputs (Sum and Carry).

1. Using Electronic WorkBench, design and implement a full adder using XOR, AND and OR gates and verify its operation.
2. Convert your design using 7400 (NAND) and 7486 (XOR) devices and verify its operation.
3. Implement the design on the breadboard and verify its operation.
4. Have T/A or instructor verify your circuit.

In preparation for this lab, design a full adder in your notebook.