Course Title: Digital Electronics Laboratory Work
Course Code: EEEG 217
Credit Hours: 1

Course Description:
The course is a practical work to reinforce the concepts learned in Digital Logic.

Course Contents:

A series of experiments to reinforce the subject matter taught in 'EEEG202: Digital Logic'. Ten to twelve laboratory experiments needs to be performed. The following laboratory experiments can be performed:

1. Verification of truth tables for different logic gates: AND, OR, NOT, NAND,NOR
2. Synthesize X-OR and X-NOR using NAND gates
3. Design and verification of simple logic circuit using primitive logic gates
4. Half adder and full adder
5. Decoder/Demultiplexer (Using IC)
6. Construct encoder and decoder
7. BCD adder and binary multiplier using Multisim
8. Design a door lock system
9. Construction of 4 to 1 MUX
10. Truth table verification and synthesis of flip flops, JK, T and D
11. Synchronous and asynchronous counter design, Decade counter
12. Design of sequential circuit using D flip flops from given state diagram in Multisim

Evaluation:
In-Semester Evaluation: 80%
End-Semester Evaluation: 20%