



العدد :

التاريخ : ٢٠ / /

Course number and name	EE 1500: Digital Logic
Credits and contact hours	3 credits and 4 hours
Course coordinator	
Textbook	Intro to Logic & Computer Design, 1 st Edition, Alan Marcovitz, 2008
Course Information	a. Prerequisites: High school math b. Required
Topics to be covered	<ul style="list-style-type: none">- Course Introduction and Overview- Number systems, arithmetic and codes- Digital data formats- Digital processing and storage mechanisms in digital devices- Binary numbers and base conversions- Error correction in digital devices- Boolean algebra and combinational logic circuits- Minterms and maxterms- Karnaugh maps- Important types of combinational logic circuits- ROM, PLD and RAM architectures.- Digital device architectures- Sequential logic and flip-flops- Classical sequential logic circuit design procedures- Synchronous State Machines- Counters, stacks and registers- Important types of sequential logic circuits