

H-Form ECE 243

A Brief Course Description			
College	Engineering		
Department/ Program	Electrical Engineering - Electronics Engineering Program		
Course Name	Introduction to Digital VLSI		
Course Code	ECE 243		
Year / Level	4/7		
Credit Hours	4		
Contact Hours	Lecture: 3	Lab/Tutorial: 2	Training: 0
Language	English		
	☐University	☐College ☐Departn	nent ⊠Program
Track	<u></u> ⊠F	Required B	Elective
Pre-requisites Course	ECE 241		
Co-Requests	-		
Course Description	Theory and practice of very-large-scale integration (VLSI) circuit design. Metal-oxide semiconductor (MOS) transistors; static and dynamic complementary metal-oxide- semiconductor (CMOS) combinational and sequential circuits; design of adders, multipliers, and shifters; performance, power consumption and testing. CAD tools for layout, timing analysis, synthesis, physical design, and verification.		