



H-Form ECE 447

A Brief Course Description			
College	Engineering		
Department/ Program	Electrical Engineering – Electronics Engineering Program		
Course Name	Digital Integrated Circuits		
Course Code	ECE 447		
Year / Level	5/9		
Credit Hours	3		
Contact Hours	Lecture: 3	Lab/Tutorial: 0	Training: 0
Language	English		
Track	<input type="checkbox"/> University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Program		
	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Elective		
Pre-requisites Course	ECE 243		
Co-Requests	-		
Course Description	MOS device models including Deep Sub-Micron effects; circuit design styles for logic, arithmetic and sequential blocks; estimation and minimization of energy consumption; interconnect models and parasitics; device sizing and logical effort; timing issues (clock skew and jitter) and active clock distribution techniques; memory architectures, testing of integrated circuits. Circuit layout and CAD tools.		