

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
1		ROM Features, Architecture	1			
2		ROM Programming	1			
3		PLA Features, Architecture	1			
4		PLA Programming	1			
5		PAL features, Architecture	1			
6		PAL Programming	1			
7		CPLD features, architecture	1			
8		CPLD Programming	1			
9		FPGA features, architecture	1			
10		FPGA Programming	1			
11		Applications & implementation of MSI chips using PLD	1			
12		CPLDs - Complex Programmable logic devices	2			
13		Altera series - Max 5000 7000 series	2			
14		Altera FLEX logic - 10000 series CPLD	2			
15		AMD's - CPLD (mach 1605)	2			
16		Cypress FLASH 370 device technology	2			
17		Lattice PLSI's architecture 3000 series	2			
18		Speed Performance & in System Programmability	2			
19		FPGAs: Field Programmable Gate arrays	3			
20		FPGA: Logic blocks	3			

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21		FPGA - routing Architecture	3			
22		FPGA - design flow	3			
23		Technology mapping for FPGAs	3			
24		Case Studies Xilinx XC4000	3			
25		ALTERA'S FLEX 8000/ 10000	3			
26		FPGAs: AT&T ORCA'S	3			
27		TOP Down Design, State transition table	4			
28		State assignments for FPGAs, realization of state machine charts using PAL	4			
29		Alternative realization for state machine charts using microprogramming	4			
30		linked state machine, encoded state machine	4			
31		Architectures Centered around non registered PLDs	4			
32		Design of State machines Centered around shift registers	4			
33		one hot state machine, Petri nets for state machines	4			
34		Basic Concepts and Properties	4			
35		Finite state machine - Case Study	4			
36		One hot design method	5			
37		Use of ASMs in one-hot design method	5			
38		Applications of one-hot design method	5			
39		Extended Petri nets for Parallel Controllers	5			
40		meta Stability & Synchronization	5			

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Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
41		Complex design using Shift registers	5			
42		System level Design : Controller	6			
43		Data Path designing	6			
44		Functional Partition	6			
45		Digital front end digital design tools for FPGAs & ASICs	6			
46		System level design using mentor graphics EDA tool	6			
47		Design flow using CPLD & FPGAs	6			
48		Design Considerations using CPLDs	6			
49		Design Considerations using FPGAs of 11u address	6			
50		Parallel adder	6			
51	}	sequential circuits	6			
52		Counters	6			
53		multipliers	6			
54		Parallel Controllers	6			