

# LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
1	16/6/14	1: <u>INTRODUCTION</u> E.S-definition, E.S. types	P	BA		
2	17/6/14	History of E.S, Classification of E.S	"	"		
3	18/6/14	major application	"	"		
4	18/6	areas of E.S	"	"		
5	19/6	purpose of E.S,	"	"		
6	23/6	Core of the E.S	"	"		
7	24/6		"	"		
8	25/6	memory	"	"		
9	25/6					
10	26/6	Series & Architect	"	"		
11	30/6	Communications Interface	"	"		

## LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
12	1/7	Embedded	"	"		
		Firmware				
13	2/7	} Other System components	"	"		
14	2/7		"	"		
15	3/7	PCB & Passive Components	"	"		
16	8/7	Characteristics of E.S	II	"		
17	9/7	Quality Attributes of E.S	"	"		
18	10/7	} Application specific E.S - Washing machine	"	"		
19	10/7		"	"		
20	11/7	} Domain specific examples of E.S - Automotive	"	PPT		
				"		
21	15/7		"			
22	16/7	Embedded H/W design	III	"		

## LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
23	13/7	Analog & digital	"	BB	"	
24	13/7	electronic components	"	"		
25	18/7	I/O Types & examples	"	"	"	
26	22/7	Serial -	"	"	"	
		communicating devices				
27	23/7	Parallel device ports	"	"	"	
28	24/7	Wireless -	"	"	"	
29	24/7	devices	"	"	"	
30	25/7	Timer & Counting devices	"	"	"	
31	29/7	Watchdog timer	"	"	"	
32	30/7	Real Time Clock	"	"	"	
33	31/7	VLSI & IC	"	"	"	
34	31/7	design	"	"	"	

## LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
35	1/8	EDA Tools	"	PPT		
36	4/8	OrCAD EDA tool.	"	PPT		
37	5/8	The PCB layout design	"	PPT		
38	6/8	} Embedded F/W design approaches	IV	BB		
39	6/8		"	"		
40	7/8	Embedded F/W development languages	"	BB		
41	18/8	ISR Concept, Interrupt sources	"	"		
42	19/8	ISR mechanism multiple interrupt	"	"		
43	20/8	DMA, Device driver programming, concept	"	"		
44	20/8	Of C Vs Embedded C	"	"		
45	21/8	Compiler Vs cross compiler	"	"		

# LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
46	24/8	RTOS Basics, Types of O.S., Tasks, Process & Threads	V	RB		
47	26/8	MP & MT Task Scheduling, Threads, Processes & Scheduling.	"	"		
48	27/8	Task communication, Task	"	"		
49	27/8	Synchronization	"	"		
50	28/8	Device drivers	"	"		
51	1/9	How to choose an RTOS	"	"		
52	2/9	Fundamental Issues in H/W & S/W co-design	VI	"		
53	3/9	Computational models in	"	"		
54	3/9	Embedded design	"	"		
55	4/9	Hardware - Software trade off's	"	"		
56	8/9	Integration of H/W & F/W	"	"		



# LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
57	9/9	ICE	1	11		
58	10/9	Issues in E.S design	11	11		
59	10/9		11	11		
60	14/9	IDE	<u>VII</u>	11		
61	15/9	Types of files generated on cross	11	11		
62	16/9	Compilation	11	11		
63 64	17/9 (2)	DeCompiler, Simulator	11	11		
65	18/9	Emulator & Debugging	11	11		
66	22/9	Target H/W - debugging	11	11		
67	23/9	Boundary Scan	11	11		
68 69	24/9 (2)	Embedded S/W development	11	11		
70	25/9	Process & tools	11	11		
71	6/10	The main S/W Utility tool	<u>VIII</u>	PPT		
72	7/10	CAO & H/W.	11	11		
73 74	8/10 (2)	Translation tools - pre processors.	11	11		
75	9/10	Interpreters, compilers, linkers	11	11		
76	13/10	Debugging tools, quality assurance	11	11		
77	14/10	Testing of the design	11	11		
78	15/10	Testing on Host machine	11	11		
79 80	16/10 (2)	Simulators, Laboratory Tools	11	11		

11/10/19