uc3m | Universidad Carlos III de Madrid
Vicerrectorado de Estudios
Apoyo a la docencia y gestión del grado

COURSE: Integrated Circuit Design		
DEGREE: Industrial Electronics and Automation Engineering	YEAR: 4th	TERM: 1st

WEEKLY PLANNING							
			TEACHING (mark X)		**SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)**	**WEEKLY PROGRAMMING FOR STUDENT**	
WEEK	**SESSION**	**DESCRIPTION**	**LECTURES**	**SEMINARS**		**DESCRIPTION**	**CLASS HOURS (1,66=50+50 min)**	**HOMEWORK HOURS (Max. Estim. 6,5h)**
1	1	Introduction	x			Get necessary material for the course (tools, etc.)	1,66	6,5
	2	Review and extension of VHDL concepts. Combinational circuits		x		Study current lessons	1,66	
2	3	Review and extension of VHDL concepts. Sequential circuits	x			Study current lessons	1,66	6,5
	4	Design validation by simulation(I)		x		Study current lessons	1,66	
3	5	Design validation by simulation(II)	x			Study current lessons	1,66	6,5
	6	Working environment and first exercises		x	Computer Room	Exercises	1,66	
4	7	Design organization. Generic design	x			Study current lessons	1,66	6,5
	8	Exercises of design and simulation		x	Computer Room	Exercises	1,66	
5	9	Loops	x			Study current lessons	1,66	6,5
	10	Preliminaty work for Lab Practice 1		x	Computer Room	Design and develop the proposed circuit	1,66	
6	11	Exercises of analysis and design	x			Exercises	1,66	6,5
	12	Lab Practice 1		x	Lab	Design and develop the proposed circuit	1,66	

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7	13	Exercises of analysis and design	x			Exercises	1,66	6,5
	14	Preliminaty work for Lab Practice 2		x	Computer Room	Design and develop the proposed circuit	1,66	
8	15	FPGAs	x			Study current lessons	1,66	6,5
	16	Lab Practice 2		x	Lab	Design and develop the proposed circuit	1,66	
9	17	Partial exam	x			Exercises and review lessons for the exam	1,66	6,5
	18	Design exercicses with IPs		x	Computer Room	Exercises	1,66	
10	19	Synthesis and design optimization	x			Study current lessons	1,66	6,5
	20	Lab Practice 3		x	Lab	Design and develop the proposed circuit	1,66	
11	21	Synthesis and design optimization (II)	x			Study current lessons	1,66	6,5
	22	Advanced design exercise		x	Computer Room	Exercises	1,66	
12	23	Design exercises	x			Exercises	1,66	6,5
	24	Lab Practice 4		x	Lab	Design and develop the proposed circuit	1,66	
13	25	Synthesis and design optimization (III)	x			Study current lessons	1,66	6,5
	26	Exercises of design and evaluation of resource usage and delays		x	Computer Room	Exercises	1,66	
14	27	Design exercises	x			Exercises	1,66	6,5
	28	Additional lab session		x	Lab	Design and develop the proposed circuit	1,66	
	29	Additional lab session		x	Lab	Design and develop the proposed circuit	1,66	3,25
						Subtotal 1	48	94
						Total 1 *(Hours of class plus student homework)*	142	

15		Tutorials, handing in, etc				Submit design exercises and lab work	3,6	-
16						Prepare for final exam		
17		Assessment					4	10

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			LECTURES	SEMINARS		DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
18								
						Subtotal 2	8	10
						Total 2 (Hours of class plus student homework)	18	

TOTAL (*Maximun 160 horas*)	160