Universidad Carlos III de Madrid
www.uc3m.es

COURSE: ELECTRONICS ENGINEERING FUNDAMENTALS		
DEGREE: BACHELOR IN AEROSPACE ENGINEERING	**YEAR: 3º**	**TERM: 1º**

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	GRUP (mark X)		LOCATION	Mark if there are 2 teachers	STUDENT WEEKLY WORK		
			LECTURE	SEMINAR			DESCRIPTION	CLASS HOURS	HOMEWORK HOURS
1	1	Introduction to electronics Part I: Voltage and current sources. Theorems (1)	X				Study theory	1,66	3
1	2	LAB 1: Laboratory instrumentation		X	LAB	Yes	Study theory	1,66	
2	3	Part I: Theorems (2). Passive components. Impedance	X				Study theory. Solve proposed exercises	1,66	3
2	4	Part I: Analog circuits simulation		X	Computer room		Study theory. Solve proposed exercises	1,66	
3	5	Part I: First order filters. Frequency response.	X				Study theory. Solve proposed exercises	1,66	5
3	6	Part I: Exercises		X			Study theory. Solve proposed exercises	1,66	

4	7	Part I: Sensors and actuators (1). Conditioning circuits	X				Study theory. Solve proposed exercises	1,66	6
4	8	Part I: Exercises		X			Study theory Solve proposed exercises	1,66	
5	9	Part I: Sensors and actuators (2).	X				Study theory. Solve proposed exercises	1,66	6
5	10	LAB 2		X	LAB	Yes	Study theory. Solve proposed exercises	1,66	
6	11	Part II: Digital circuits fundamentals (1)	X				Study theory. Solve proposed exercises	1,66	
6	12	Exercises		X			Study theory. Solve proposed exercises	1,66	6
7	13	Part II: Digital circuits fundamentals (2)	X				Study theory. Solve proposed exercises	1,66	
7	14	Part II: Exercises		X			Study theory. Solve proposed exercises Prepare exam	1,66	6
8	15	Quizz	X				Prepare exam	1,66	
8	16	Part II: Fundamentals of programming in C		X			Study theory. Solve proposed exercises	1,66	6
9	17	Part II: Microcontrollers. I/O ports	X				Study theory. Solve proposed exercises	1,66	
9	18	Part II: SW development environment		X	LAB		Study theory. Solve proposed exercises Work in the project	1,66	6
10	19	Part II: Microcontrollers. Timers	X				Study theory. Solve proposed exercises Work in the project	1,66	
10	20	LAB 3: Session 1 Project		X	LAB	SI	Study theory. Solve proposed exercises	1,66	6
11	21	Part II: Exercises	X				Solve proposed exercises Work in the project	1,66	
11	22	LAB 4: Session 2 Project		X	LAB	SI	Study theory. Solve proposed exercises	1,66	6
12	23	Part II: Microcontrollers. ADC and DAC	X				Study theory. Solve proposed exercises Work in the project	1,66	

12	24	LAB 5: Session 3 Project		X	LAB	Yes	Study theory. Solve proposed exercises Work in the project	1,66	6
13	25	Part II: Microcontrollers. Series interfaces	X				Study theory. Solve proposed exercises	1,66	
13	26	Exercises		X			Solve proposed exercises	1,66	6
14	27	Exercises	X				Solve proposed exercises	1,66	
14	28	LAB 6: Session 4 project. Assessment		X	LAB	Yes	Solve proposed exercises	1,66	6
15	29	Exercises		X			Solve proposed exercises	1,66	
15									
14							**Subtotal 1**	**48,14**	**77**
		Total 1 *(Weeks 1-14)*						**125,14**	
		Exam preparation and exam					Study for the exam Complete the exercises proposed	3	21
15									
16									
17							**Subtotal 2**	**3**	**22**
		Total 2 *(Weeks 15-18)*						**25**	
TOTAL *(Total 1 + Total 2. Maximum 180 hours)*								**150,14**	