Universidad Carlos III de Madrid
www.uc3m.es

COURSE: MICROPROCESSOR BASED DIGITAL SYSTEMS		
DEGREE: TELECOMMUNICATION RELATED BACHELORS	**YEAR: 2º**	**TERM: 2º**

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	GROUP (mark X)		Location	Teachers number	STUDENT WEEKLY WORK		
			LECTURE	SEMINAR			DESCRIPTION	CLASS HOURS	HOMEWORK HOURS
1	1	Chapter 1: Introduction	X			1	Study theoretical concepts	1,66	2
1	2	Chapter 2: Microprocessors and Microcontrollers		X		1	Study theoretical concepts	1,66	
2	3	Chapter 3: Internal Architecture	X			1	Study theoretical concepts. Complete the exercises proposed.	1,66	3
2	4	Chapter 3: Internal Architecture. Exercises		X		1	Study theoretical concepts. Complete the exercises proposed.	1,66	
3	5	Chapter 4: Assembler	X			1	Study theoretical concepts. Complete the exercises proposed.	1,66	5
3	6	Chapter 4: Assembler. Exercises		X		1	Study theoretical concepts. Complete the exercises proposed.	1,66	
4	7	Chapter 5: GPIO and AFs	X			1	Study theoretical concepts. Complete the exercises proposed.	1,66	7

4	8	Chapter 6: Block diagrams, Flowcharts, Structuring solutions. Divide and Conquer. Library creation. Introduction to the Development Environment		X		1	Study theoretical concepts. Complete the exercises proposed.	1,66	
5	9	Partial Exam (Architecture and GPIOs)	X			1	Study for the exam Study theoretical concepts. Complete the exercises proposed.	1,66	5
5	10	Chapter 7: ADC		X		1	Study theoretical concepts. Complete the exercises proposed.	1,66	
5	11	Laboratory: Session 1		X	Lab	2	Preparing the laboratory session	1,66	
6	12	Chapter 7: DAC. Exercises ADC and DAC	X			1	Study theoretical concepts. Complete the exercises proposed. Preparing the laboratory session	1,66	5
6	13	Laboratory: Session 2		X	Lab	2	Preparing the laboratory session	1,66	
7	14	Chapter 8: IRQs and EXTI	X			1	Study theoretical concepts. Complete the exercises proposed. Preparing the laboratory session	1,66	7
7	15	Chapter 8: Exercises with EXTI / IRQ-ADC		X		1	Study theoretical concepts. Complete the exercises proposed.	1,66	
8	16	Chapter 9: Timers	X			1	Study theoretical concepts. Complete the exercises proposed. Preparing the laboratory session	1,66	7
8	17	Laboratory: Session 3		X	Lab	2	Preparing the laboratory session	1,66	
9	18	Chapter 9: Timers	X			1	Study theoretical concepts. Complete the exercises proposed.	1,66	5
9	19	Chapter 9: Timers. Exercises		X		1	Study theoretical concepts. Complete the exercises proposed.	1,66	
10	20	Chapter 10: Asynchronous Serial Communication (USART)	X			1	Study theoretical concepts. Complete the exercises proposed. Preparing the laboratory session	1,66	7
10	21	Laboratory: Session 4		X	Lab	2	Preparing the laboratory session	1,66	
11	22	Chapter 11: Synchronous Serial Communication (SPI/I2C)	X			1	Study theoretical concepts. Complete the exercises proposed.	1,66	5
11	23	Chapter 10-11: Serial Communication Exercises		X		1	Study theoretical concepts. Complete the exercises proposed.	1,66	
12	24	Chapter 12: RTC, WDG, Design	X			1	Study theoretical concepts. Complete the exercises proposed.	1,66	7

							Preparing the laboratory session		
12	25	Laboratory: Session 5		X	Lab	2	Preparing the laboratory session	1,66	
13	26	Past exam exercises (I)	X			1	Complete the exercises proposed.	1,66	5
13	27	Past exam exercises (II)		X		1	Complete the exercises proposed.	1,66	
14	28	Past exam exercises (III)	X			1	Complete the exercises proposed.	1,66	4
14	29	Laboratory: Session 6		X	Lab	2	Preparing the laboratory session	1,66	
							Subtotal 1	**48,14**	**74**
		Total 1						**122,14**	
15		Make-up classes, tutorials, homework handing in, etc.						**17,86**	
16		Exam preparation and exam					Study for the exam Complete the exercises proposed.	3	40
17									
18									
							Subtotal 2	**3**	**40**
		Total 2						**57,86**	
TOTAL *(Total 1 + Total 2. Maximum 180 hours)*								**180**	