uc3m Universidad Carlos III de Madrid

COURSE: Electronic Components and Circuits	YEAR:	2nd
DEGREE: Telematics Engineering	TERM:	1st

The course has 29 sessions distributed in 14 weeks. The duration of each session is 100 minutes (50 + 50) with 10 minutes breaks. The laboratory sessions are included in 4 of these sessions with a duration of 100 minutes. The student will have 2 sessions per week.

		WEE	KLY PLANNING Group		Studen Weekly Work		
Week	Session	Description		Location	Sidden Weekly Work		
			Lecture	Seminar	Description	Class Hours	Homework Hours
1		Course Presentation. Electronic and Photonic Components. Application circuits and characterization 1: Passive components	x		Theory Study Exercices Resolution Work with SPOC DTE Laborary	1.67	7
		Electronic and Photonic Components. Application circuits and characterization 2: Passive Components Exercices. Resistive Circuits Analysis		X Lab.		1.67	
2	3	Electronic and Photonic Components. Application circuits and characterization 3: RC Circuits Analysis	х		Theory Study Exercises Resolution Preparation of practice 1. Comprehension of the	1.67	5
	4	Electronic and Photonic Components. Application circuits and characterization 4: PRACTICE 1 Laboratory Instrumentation and Measurement Techniques		x	practice manual and the necessary theoretical calculations	1.67	
3	5	Electronic and Photonic Components. Application circuits and characterization 5: Electronic Circuits Simulation Tools. RC Circuits Characterization	x		Exercises Resolution Comprehension of the introduction to electronic circuits simulation tools Decentratice of exercise 2. Comprehension of the	1.67	7
	6	Electronic and Photonic Components. Application circuits and characterization 6: PRACTICE 2 Passive Components Circuits		X Lab.	 Preparation of practice 2. Comprehension of the practices manual and the necessary theoretical calculations 	1.67	
4	7	Electronic and Photonic Components. Application circuits and characterization 7: Semiconductor Fundamentals. Diodes	x		Theory Study Exercices Resolution	1.67	6
	8	Electronic and Photonic Components. Application circuits and characterization 8: Diodes Application Circuits. Exercices with Diode Circuits		x		1.67	
5	9	Electronic and Photonic Components. Application circuits and characterization 9: Transistors	x		Theory Study Exercices Resolution	1.67	6
	10	Electronic and Photonic Components. Application circuits and characterization 10: Exercices with Polarization Circuits of Transistors		x		1.67	
6		Electronic and Photonic Components. Application circuits and characterization 11: Photonic Devices	x		Theory Study Exercices Resolution MIDTERM EXAM STUDY	1.67	7
	12	Electronic and Photonic Components. Application circuits and characterization 12: Exercices with Photonic Devices and Applications		x		1.67	
7		MIDTERM EXAM 1 Electronic and Photonic Components. Application Circuits and Characterization	x		Exercices Resolution MIDTERM EXAM STUDY	1.67	5
	14	Electronic and Photonic Components. Application circuits and characterization 14: Microsystems		x		1.67	
8	15	Electronic Signal Amplifiers 1: Signal Amplifiers Introduction. Definition and parameters	x		Theory Study Exercices Resolution	1.67	6
	16	Electronic Signal Amplifiers 2: Signal Amplifiers with Discrete Components. Example.		x		1.67	
9	17	ElectronicSignal Amplifiers 3: Signal Amplifiers with Discrete Components at Medium Frequencies	x		Theory Study Exercices Resolution	1.67	6
	18	Electronic Signal Amplifiers 4: Exercises of amplifiers with discrete components		x		1.67	
10	19	Electronic Signal Amplifiers 5: Current Sources and Differential Pair	x		Theory Study Exercises Resolution Preparation of practice 3. Comprehension of the	1.67	6
	20	Electronic Signal Amplifiers 6: PRACTICE 3: Characterization of Amplifiers at Medium Frequencies		Lab./Vitual Clasroon	practice manual and the necessary theoretical calculations	1.67	
11	21	Electronic Signal Amplifiers 7: Active Loads and Integrated Amplifiers	x		Exercices Resolution MIDTERM EXAM STUDY	1.67	7
	22	Electronic Signal Amplifiers 8: Exercises of Integrated Amplifiers		x		1.67	

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	COURSE:	Electronic Components and Circuits				YEAR:	2n
	DEGREE:	Telematics Engineering				TERM:	1
12		MIDTERM EXAM II Signal Amplifiers at Medium Frequencies	x		Exercices Resolution MIDTERM EXAM STUDY	1.67	6
		Electronic Signal Amplifiers 10: Operational Amplifier and Application Circuits		x		1.67	
13	25	Frequency Response 1: Frequency Response Introduction	x		Theory Study Exercices Resolution	1.67	6
	26	Erequency Response 2: Frequency Response of Signal Amplifiers		x		1.67	
14	27	Frequency Response 3: Exercices of Frequency Response	x		Exercises Resolution Preparation of practice 3. Comprehension of the practice manual and the necessary theoretical calculations	1.67	6
14		Electronic Signal Amplifiers 6: PRACTICE 4: Frequency Response of Amplifiers		X Lab./Vitual Clasroon	1	1.67	
14	29	CASE STUDY	X		Study Case Work	1.67	5
					Subtotal 1	48.35	91
			Total 1 (C	Class hours and homework hours	s between weeks 1-14)	13	9.35
15		Make-up classes, tutorials, homeworks handing in, etc				1.67	
16-18		Exam preparation and exam				3	16
			Total 2 (0	Class hours and homework hours	Subtotal 2 s between weeks 15-18)		16 D.67
					TOTAL	1	160