uc3m | Universidad Carlos III de Madrid

SUBJECT: Computer Engineering and Systems for the IoT.		COURSE: 2020/2021	
MASTER: MASTER IN INTERNET OF THINGS: APPLIED TECHNOLOGIES		YEAR: 1	TERM: 1

WEEK	SESSION	DESCRIPTION	CLASSROM	WEEKLY PROGRAMMING FOR STUDENT		
				DESCRIPTION	CLASS HOURS	HOMEWORKS HOURS
1 Jose	1 **(14 Sept)**	Presentation Part 1: Management and display of IoT data Introduction of theoretical contents (Theory)	Classroom	Study concepts taught	1,5	3,5
2 Jose	2 **(21 Sept)**	Time Series Databases (TSDB) • Introduction to InfluxDB.	Classroom	Study concepts taught	1,5	3,5
3 Jose	3 **(28 Sept)**	Time Series Database Management • Data insertion on InfluxDB	Classroom	Study concepts taught	1,5	3,5
4 Jose	4 **(5 Oct)**	Time Series Database Management • Data display on InfluxDB: Chronograf	Classroom	Study concepts taught	1,5	3,5
5	5 (12 Oct)			Study concepts taught		3,5

6 Pablo	6 (19 Oct)	Time Series Database Management Alert Management: Kapacitor	Classroom	Study concepts taught	1,5	3,5
7 Pablo	7 **(26 Nov)**	Presentation Part 2: HW, Sensors and actuators. • Introduction to theoretical contents (Theory)	Classroom	Study concepts taught	1,5	3,5
8	8 **(2 Nov)**					3,5
9 Pablo	9 **(9 Nov)**	Hardware, Sensors and Actuators (Theory) • Microcontrollers (types, effectiveness, consumption, etc...) • Sensors (measuring, temperature, pressure, humidity, etc...) • Actuators (handling, operation, etc...)	Classroom	Study concepts taught	1,5	3,5
10 Pablo	10 **(16 Nov)**	Hardware Practice (Lab) • Board configuration (MCU node)	Classroom	Study concepts taught	1,5	3,5
11 Pablo	11 **(23 Nov)**	Hardware Practice (Lab) • Data collection • Receiving and sending system.	Classroom	Study concepts taught	1,5	3,5
12 Jose & Pablo	12 **(30 Nov)**	Global Tutorials: Final System Practice (Lab) • Presentation and approval of the final practice.	Classroom	Study concepts taught	1,5	3,5
13	13 **(7 Dic)**					3,5
14 Jose & Pablo	14 **(14 Dic)**	Face-to-face practical tutorials.	Classroom	Final Project Development	1,5	3,5
15 Jose & Pablo	15 **(21 Dic)**	Face-to-face practical tutorials.	Classroom	Final Project Development	1,5	
					19,5	**52,5**
				TOTAL	**72**	