Universidad Carlos III de Madrid

SUBJECT: Machine-2-Machine Communications		
MASTER DEGREE: MASTER IN CONNECTED INDUSTRY 4.0	ECTS: 3	QUARTER: 1

TIMETABLE FOR THE SUBJECT

WEEK	SESSION	DESCRIPTION OF EACH SESSION	GROUP (X mark)		Indicate if a different lecture room is needed (computer, audiovisual, etc.)	HOMEWORK PER WEEK		
			1	2		DESCRIPTION	ATTENDING HOURS	HOMEWORK Max. 7H/WEEK
1	1	Introduction to the protocol architecture	X			Read the material and the references provided	1,5	3,5
1	2	Application layer protocols: HTTP-REST	X			Read the material and the references provided	1,5	3,5
2	3	Application layer protocols: HTTP-REST (2)	X			Read the material and the references provided	1,5	3,5
2	4	HTTP Lab	X		laboratory	Read the statement of the practical assignment and review what has been explained in theory	1,5	3,5

3	5	Application-level protocols: CoAP, MQTT/MQTT-SN, others	X			Read the material and the references provided	1,5	3,5
3	6	IoT security	X			Read the material and the references provided	1,5	3,5
3	7	Machine to machine communications through the Cloud	X			Read the material and the references provided	1,5	3,5
4	8	IoT and BigData Lab	X		laboratory	Read the statement of the practical assignment and review what has been explained in theory	1,5	3,5
4	9	Firebase for IoT	X			Read the material and the references provided	1,5	3,5
4	10	Firebase and IoT Lab	X		laboratory	Read the statement of the practical assignment and review what has been explained in theory	1,5	3,5

5	11	Edge computing: Machine Learning in IoT devices (tinyML)	X			Read the material and the references provided	1,5	3,5
5	12	Edge computing: Devices (Coral Edge TPU device)	X			Read the material and the references provided	1,5	3,5
6	13	Use cases in Industrial IoT. Practical case Talgo + demo	X			Review the concepts seen throughout the course	1,5	3,5
6								
7	14	Exam	X			Study the concepts seen throughout the course		
TOTAL HOURS							19,5	45,5