Universidad Carlos III de Madrid
www.uc3m.es

COURSE: SENSORES ELECTRÓNICOS PARA IoT		
MASTER: INTERNET OF THINGS	**YEAR: 2019-20**	**TERM: 1st**

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	GROUPS (mark X)		Special room for session (computer classroom, audio-visual classroom…)	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS/ LAB[1]		DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
1	1	An introduction to the new sensors in IoT	X			Previous reading. Answering questions about background.	1,5	4
1	2	The physical magnitudes to control and monitor in an IoT environment: "the *things* of Internet of things".	X			Previous reading. Answering questions about what has been taught. Catching up with basic knowledge.	1,5	
2	3	Discovering the sensors (electronic, optical, optoelectronic…) in IoT through their applications.	X			Previous reading. Answering questions about what has been taught. Catching up with basic knowledge.	1,5	5
2	4	Discovering the sensors (electronic, optical, optoelectronic…) in IoT through their applications.	X			Previous reading. Answering questions about what has been taught. Catching up with basic knowledge.	1,5	

3	5	Discovering the sensors (electronic, optical, optoelectronic…) in IoT through their applications.	X			Previous reading. Answering questions about what has been taught. Working in IoT sensing project.	1,5	5
3	6	Signal conditioning in integrated, embedded and compact sensors in IoT. Their connections and signal processing in critical and diverse environments. Works assignment.	X			Previous reading. Answering questions about what has been taught. Working in IoT sensing project.	1,5	
4	7	Signal conditioning in integrated, embedded and compact sensors in IoT. Their connections and signal processing in critical and diverse environments.	X			Previous reading. Answering questions about what has been taught. Working in IoT sensing project.	1,5	5
4	8	First round of discussion of the Works: placement, specifications, state of the art.	X			Previous reading. Answering questions about what has been taught. Working in IoT sensing project.	1,5	
5	9	Actuators and their conditioning in IoT: MEMs, motors, displays, etc.	X			Previous reading. Answering questions about what has been taught. Working in IoT sensing project.	1,5	5
5	10	Second round of discussion of the Works: more over state of the art block diagram, application.	X			Previous reading. Answering questions about what has been taught. Working in IoT sensing project.	1,5	
6	11	Actuators and their conditioning in IoT: MEMs, motors, displays, etc.	X			Previous reading. Answering questions about what has been taught. Working in IoT sensing project.	1,5	5
6	12	Third round of discussion of the Works: the implementation of the sensing application.	X			Previous reading. Answering questions about what has been taught. Working in IoT sensing project.	1,5	
7	13	Works: presentation workshop	X			Previous reading. Answering questions about what has been taught. Working in IoT sensing project.	1,5	5

7	14	Works: presentation workshop		X			Previous reading. Answering questions about what has been taught.	1,5	
						Subtotal 1		**21**	**34**
						Total 1 *(Hours of class plus student homework hours between weeks 1-7)*		**55**	

[1] **A maximum of 1-2 lab sessions**

1-7		Tutorials, handing in, etc					10	
8		Assessment					3	7
						Subtotal 2	**3**	**17**
						Total 2 *(Hours of class plus student homework hours at week 8)*	**20**	

TOTAL *(Total 1 + Total 2)*	**75**