uc3m | Universidad Carlos III de Madrid
Vicerrectorado de Estudios
Apoyo a la docencia y gestión del grado

COURSE: Design and analysis of automated processes		
DEGREE: Bachelor's Degree in Industrial Technologies Engineering	YEAR: 4	TERM: 1

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	TEACHING (mark X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS		DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 3,25h)
1	1	Introduction. Description and rules of the course. Review of concepts and general description of common terms.	X			Previous reading of the topics covered in class and study of the concepts. Solving proposed exercises.	1,66	3
2	2	Flexible manufacturing and Lean production.	X			Previous reading of the topics covered in class and study of the concepts. Solving proposed exercises.	1,66	3
3	3	Industry 4.0	X			Previous reading of the topics covered in class and study of the concepts. Solving proposed exercises.	1,66	3
4	4	Information management I: CIM architectures, CIMOSA	X			Previous reading of the topics covered in class and study of the concepts. Solving proposed exercises.	1,66	3
5	5	Information management II: communication protocols, field buses	X			Previous reading of the topics covered in class and study of the concepts. Solving proposed exercises.	1,66	3
6	6	Information management III: Industrial Ethernet	X			Previous reading of the topics covered in class and study of the concepts. Solving proposed exercises.	1,66	3
7	7	Industruial communication lab I	X		Laboratory	Reading and understanding of the lab session guidelines and the additional documentation.	1,66	3,25
8	8	Industruial communication lab II	X		Laboratory	Reading and understanding of the lab session guidelines and the additional documentation.	1,66	3,25
9	9	Material management	X			Previous reading of the topics covered in class and study of the concepts. Solving proposed exercises.	1,66	3
10	10	SCADA systems	X			Previous reading of the topics covered in class and study of the concepts. Solving proposed exercises.	1,66	3
11	11	Quality management	X			Previous reading of the topics covered in class and study of the concepts. Solving proposed exercises.	1,66	3
12	12	Analysis and simulation	X			Previous reading of the topics covered in class and study of the concepts. Solving proposed exercises.	1,66	3
13	13	Simulation lab I	X		Computer	Reading and understanding of the lab session guidelines and the additional documentation.	1,66	3,25
14	14	Simulation lab II	X		Computer	Reading and understanding of the lab session guidelines and the additional documentation.	1,66	3,25
	15						1,66	3,25
						Subtotal 1	**25**	**46**
						Total 1 *(Hours of class plus student homework)*	**71**	
15		Tutorials, handing in, etc					1,8	-
16								
17		Assessment					4	4
18								
						Subtotal 2	**6**	**4**
						Total 2 *(Hours of class plus student homework)*	**10**	
TOTAL *(Maximun 83 horas)*							**81**	