Universidad Carlos III de Madrid

SUBJECT:	Methods and optimization techniques		
MASTER DEGREE: Master in Industrial Mechanical Teacher: María Belén Muñoz Abella		ECTS: 3	SEMESTER: 2

TIMETABLET FOR THE SUBJECT

WEEK	SESSION	DESCRIPTION OF EACH SESSION	GROUP (X mark)		Indicate if a different lectura roo mis needed (computer, audiovisual, et.)	HOMEWORK PER WEEK		
			1	2		DESCRIPTION	ATTENDING HOURS	HOMEWORK Max. 7H/Week7
1	1	Presentation of the subject. Introduction to optimization techniques	X		Computer	Presentation of the subject	1.5	2
2	2	Traditional optimization methods	X		Computer	Traditional optimization methods	1.5	3
3	3	Optimization exercises by traditional methods	X		Computer	Optimization exercises by traditional methods	1.5	4
4	4	Introduction to optimization work with Matlab software	X		Computer	Introduction to optimization work with Matlab software	1.5	3
5	5	Exercises using Matlab software (session 1)	X		Computer	Exercises using Matlab software	1.5	4
6	6	Exercises using Matlab software (session 2)	X		Computer	Exercises using Matlab software	1.5	4

7	7	Introduction to Genetic Algorithms (GA)	X		Computer	Introduction to Genetic Algorithms	1.5	3
8	8	Introduction to GA using Matlab software	X		Computer	Introduction to GA using Matlab software	1.5	4
9	9	Problems solving using GA	X		Computer	Problems solving using GA	1.5	4
10	10	Introduction to Artificial Neural networks (ANN)	X		Computer	Introduction to Artificial Neural networks (ANN)	1.5	3
11	11	Introduction to ANN using Matlab	X		Computer	Introduction to ANN using Matlab	1.5	4
12	12	Problems solving using ANN	X		Computer	Problems solving using ANN	1.5	4
13	13	Presentation of Works (session 1)	X		Computer	Presentation of Works	1.5	6
14	14	Presentation of Works (session 2)	X		Computer	Presentation of Works	1.5	6
TOTAL HOURS							21	54