



**SUBJECT: Integrated Manufacturing Systems**

**MASTER DEGREE: Industrial Mechanics**  
José Luis Cantero Guisández

**ECTS: 3**

**QUARTER: 1º**

**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 computer-integrated manufacturing. Application of CAE tools (numerical simulation)	X	X		previous reading of the topics of the class	1,5	3
2	2	Case study: Design oriented to the manufacture of a product obtained by sheet metal forming	X	X	Virtual classroom	Realization of the proposed work in class	1,5	4
3	3	Lab 1: Simulation of a sheet metal forming process	X	X	Virtual classroom	Realization of the proposed work in class	1,5	4
4	4	Case study: Simulation of an sheet metal stamping	X	X	Virtual classroom	Realization of the proposed work in class	1,5	4
5	5	Case study: Simulation of a rolling process	X	X	Virtual classroom	Realization of the proposed work in class	1,5	4
6	6	CIM tools: MRP, MRP II. CIM prospective. 4.0 Industry	X	X		previous reading of the topics of the class	1,5	3



7	7	Practical cases: Completion of the proposed works	X	X	Virtual classroom	Realization of the proposed work in class	1,5	4
8	8	Midterm exam. Lab 2: Application of CAD-CAM tools to 3D milling of a forming tool	X	X	Virtual classroom	Realization of the proposed work in class	1,5	4
9	9	Collective tutoring of students for proposed Practical cases	X	X	Virtual classroom	Realization of the proposed work in class	1,5	4
10	10	Collective tutoring of students for proposed Practical cases	X	X	Virtual classroom	Realization of the proposed work in class	1,5	4
11	11	Seminar 1: Implementation and description of integrated manufacturing strategies in Airbus	X	X		Preparation of group work	1,5	4
12	12	Seminar 2: Industrial cases of integrated manufacturing strategies	X	X		Preparation of group work	1,5	4
13	13	Presentations of work groups	X	X		Preparation of group work	1,5	4
14	14	Presentations of work groups	X	X		Preparation of group work	1,5	4
<b>TOTAL HOURS</b>							<b>21</b>	<b>54</b>