## uc3m Universidad Carlos III de Madrid

Vicerrectorado de Estudios Apoyo a la docencia y gestión del grado

COURSE: Engineering Graphics		
DEGREE: Bachelor in Mechanical Engineering	YEAR: 1º	TERM: 2º

	WEEKLY PLANNING								
,	s		TEACHING (mark X)		SPECIAL ROOM	WEEKLY PROGRAMMING FOR STUDENT			
W E E K	E S I O N	DESCRIPTION	L E C T U R E S	S E M I N A R	FOR SESSION (Computer class room, audio-visual class room)	DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)	
1	1 1	INTRODUCTION TO TECHNICAL DRAWING AND REPRESENTATION SYSTEMS. NORMALIZATION	Х		NO	Knowing different representation systems and their basic rules	1,66	5,0	
	2	SOLID EDGE ENVIROMENT. FIRST OPERATIONS		Х	YES	Starting to work with a CAD program	1,66		
2	3	ORTHOGRAPHIC PROJECTION (OP): BASICS	Х		NO	Reviewing basic knowledge about Orthographic projection (OP)	1,66	5,0	
2	4	BASIC EXERCISES ABOUT ORTHOGRAPHIC PROJECTION (OP)		Х	NO	Realizing basic exercises about Orthographic projection	1,66	3,0	
3	ר ו	OP: REVOLUTION METHOD, FOLD LINE METHOD AND CHANGE OF PROJECTION PLANES.	Х		NO	Learning how and when doing apply revolution method, fold line method and change of projection planes.	1,66	5,0	
3	6	EXERCISES ABOUT OP: REVOLUTION METHOD, FOLD LINE METHOD AND CHANGE OF PROJECTION PLANES.		Х	NO	Applying revolution method, fold line method and change of projection planes to solve geometric problems.	1,66	3,0	
4	7	OP: DISTANCES AND ANGLES	Χ		NO	Learning to represent and measure distances and angles in OP	1,66	5,0	
4	8	EXERCISES ABOUT OP: DISTANCES AND ANGLES		Х	NO	Solving geometric problems about distances and angles	1,66	3,0	
	9	EXAM ABOUT OP	Χ		NO	Exam about OP concepts	1,66		

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5	10	SOLID EDGE PART ENVIRONMENT		Х	YES	Learning CAD operations to generate 3D parts	1,66	6,5
6	11	AXONOMETRIC SYSTEM	х		NO	Learning the bases of the axonometric system	1,66	6.5
0	12	AXONOMETRIC SYSTEM II		Х	NO	Applying the axonometric system concepts to represent parts	1,66	6,5
7	13	VIEWS	х		NO	Applying the OP concepts to represent parts	1,66	C.F.
,	14	EXERCISES ABOUT VIEWS		Х	NO	Realizing exercises about representing parts	1,66	6,5
0	15	SECTIONS, CUTS AND BREAKS	Х		NO	Applying the OP concepts to represent parts	1,66	6,5
8	16	EXERCISES ABOUT SECTIONS, CUTS AND BREAKS		Х	NO	Realizing exercises about representing parts	1,66	0,5
•	17	DIMENSIONING AND REPRESENTATION I	Х		NO	Learning the basic standards about dimensioning and representation	1,66	C.F.
9	18	EXERCISES ABOUT DIMENSIONING I		Х	NO	Applying the OP concepts to represent and dimension parts	1,66	6,5
10	19	DIMENSIONING AND REPRESENTATION II	Х		NO	Learning the basic standards about dimensioning and representation	1,66	6,5
10	20	SOLID EDGE DRAFT ENVIROMENT. DIMENSIONING		Х	YES	Learning to generate and dimension a draft with CAD	1,66	
11	21	STANDARD PARTS	Х		NO	Learning to identify the most usual standard parts	1,66	6,5
	22	SOLID EDGE ASSEMBLY ENVIROMENT		Х	YES	Learning to assembly parts with CAD	1,66	
12	23	ASSEMBLIES	Х		NO	Learning to realize and understand an assembly draft	1,66	6,5
	24	EXERCISES OF ASSEMBLIES		Х	NO	Practising to realize and understand an assembly draft	1,66	0,5
	25	DETAIL DRAFT	Х		NO	Learning to realize a detail drawing	1,66	

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13	26	EXERCISES OF DETAIL DRAFTS		Х	NO	Applying the theory to realice detail drawings	1,66	6,5	
14	27	GEOMETRIC AND DIMENSIONAL TOLERANCES	Х		NO	Learning the tolerance concept and how to calculate them	1,66	6,5	
14	28	TOLERANCES APPLICATION. DESIGN ANALYSIS.		Х	NO	Applying the concept and calculation of tolerances to design problems	1,66	0,3	
	29	CAD EXAM		Χ	YES	Exam about the used CAD program	1,66	3,25	
-						Subtotal 1	48	88	
	Total 1 (Hours of class plus student homework)						1	36	
15		Tutorials, handing in, etc				Finishing a Project that summarizes all the acquired knowledge	3,6	-	
16 17 18		Assessment					4	10	
					•	Subtotal 2	8	10	
	Total 2 (Hours of class plus student homework)							18	

154

TOTAL (<u>Maximun 160 horas</u> )