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

COURSE: ENGINEERING GRAPHICS		
DEGREE: BACHELOR IN ENERGY ENGINEERING	YEAR: 1	TERM: 2

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. 6,5h)**

WEEK	SESSION	DESCRIPTION	LECTURES	SEMINARS	SPECIAL ROOM	DESCRIPTION	CLASS HOURS	HOMEWORK HOURS
1	1	LECTURE 1. INTRODUCTION TO ENGINEERING GRAPHICS AND THE REPRESENTATION SYSTEMS. STANDARDIZATION.	X		NO	Knowing different representation systems and their basic rules.	1.66	5.0
	2	SOLID EDGE ENVIRONMENT. FIRST OPERATIONS.		X	YES	Starting to work with a CAD software.	1.66	
2	3	LECTURE 2. ORTHOGRAPHIC PROJECTION (OP): BASICS.	X		NO	Reviewing basic knowledge about Orthographic Projection (OP).	1.66	5.0
	4	BASIC EXERCISES ABOUT ORTHOGRAPHIC PROJECTION (OP)		X	NO	Realizing basic exercises about OP.	1.66	
3	5	LECTURE 3. OP: REVOLUTION METHOD, FOLD LINE METHOD AND CHANGE OF PROJECTION PLANES.	X		NO	Learning how and when doing apply revolution method, fold line method and change of projection planes.	1.66	5.0
	6	EXERCISES ABOUT OP: REVOLUTION METHOD, FOLD LINE METHOD AND CHANGE OF PROJECTION PLANES.		X	NO	Applying revolution method, fold line method and change of projection planes to solve geometric problems.	1.66	
4	7	LECTURE 4. OP: DISTANCES AND ANGLES.	X		NO	Learning to represent and measure distances and angles in OP.	1.66	5.0
	8	EXERCISES ABOUT OP: DISTANCES AND ANGLES.		X	NO	Solving geometric problems about distances and angles.	1.66	
5	9	PARTIAL EXAM OF ORTHOGRAPHIC PROJECTION (OP).	X		NO	Partial exam about the application of the OP knowledge.	1.66	6.5

WEEK	SESSION	DESCRIPTION	LECTURES	SEMINARS	SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	WEEKLY PROGRAMMING FOR STUDENT — DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
5	10	SOLID EDGE PART ENVIRONMENT.		X	YES	Learning CAD operations to generate 3D parts.	1.66	6.5
6	11	LECTURE 5. AXONOMETRIC SYSTEM.	X		NO	Learning the basics of the axonometric system.	1.66	6.5
	12	EXERCISES ABOUT AXONOMETRIC SYSTEM		X	NO	Applying the axonometric system concepts to represent parts.	1.66	
7	13	LECTURE 6. VIEWS.	X		NO	Applying OP concepts to represent parts.	1.66	6.5
	14	EXERCISES ABOUT VIEWS.		X	NO	Representing parts in dihedral views.	1.66	
8	15	LECTURE 7. SECTIONS, CUTS AND BREAKS.	X		NO	Applying OP concepts to represent cuts.	1.66	6.5
	16	EXERCISES ABOUT SECTIONS, CUTS AND BREAKS.		X	NO	Representing cuts in parts.	1.66	
9	17	LECTURE 8. DIMENSIONING AND REPRESENTATION.	X		NO	Learning the basics standards to dimensioning and representation.	1.66	6.5
	18	EXERCISES ABOUT DIMENSIONING AND REPRESENTATION.		X	NO	Learning to dimension drafts.	1.66	
10	19	PARTIAL EXAM OF VIEWS AND ISOMETRIC.	X		NO	Partial exam about the application of the views and isometric knowledge.	1.66	6.5
	20	SOLID EDGE DRAFT ENVIRONMENT. DIMENSIONING.		X	YES	Learning to generate and dimension a draft with CAD.	1.66	
11	21	LECTURE 10. STANDARD ELEMENTS.	X		NO	Learning to identify the most usual standard parts.	1.66	6.5
	22	LECTURE 11. ASSEMBLY DRAFTS.		X	YES	Learning to realize and understand an assembly draft. Learning to assembly parts with CAD.	1.66	
12	23	EXERCISES ABOUT ASSEMBLY DRAFTS.	X		NO	Practising to realize and understand an assembly draft.	1.66	6.5
	24	SOLID EDGE ASSEMBLY ENVIRONMENT.		X	NO	Learning to assembly parts with CAD.	1.66	
13	25	LECTURE 12. DETAILED DRAFTS.	X		NO	Learning to realize a detailed drawing.	1.66	6.5
	26	EXERCISES ABOUT DETAILED DRAFTS.		X	NO	Applying the theory to realice detailed drawings.	1.66	
14	27	LECTURE 13. DIMENSIONAL AND GEOMETRIC TOLERANCES.	X		NO	Learning the tolerance concept and how to calculate tolerances.	1.66	6.5

WEEKLY PLANNING

WEEKLY PLANNING								
W E E K	S E S S I O N	DESCRIPTION	TEACHING (mark X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	WEEKLY PROGRAMMING FOR STUDENT		
			L E C T U R E S	S E M I N A R S		DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
14	28	EXERCISES ABOUT DIMENSIONAL AND GEOMETRIC TOLERANCES.		X	NO	Applying the concept and calculation of tolerances to design problems.	1.66	6.5
	29	PARTIAL EXAM OF ASSEMBLY AND TOLERANCES.		X	YES	Partial exam about the application of assembly and tolerances knowledge.	1.66	3.25
						Subtotal 1	48	88
						Total 1 *(Hours of class plus student homework)*	136	
15		Tutorials, handing in, etc				Finishing a project that summarizes all the acquired knowledge.	3.6	-
16		Assessment					4	10
17								
18								
						Subtotal 2	8	10
						Total 2 *(Hours of class plus student homework)*	18	
TOTAL (*Maximun 160 horas*)							154	