## uc3m Universidad Carlos III de Madrid

Vicerrectorado de Estudios Apoyo a la docencia y gestión del grado

## COURSE: Elasticity and Strength of Material

DEGREE: Grado en Ingeniería en Tecnologías Industriales

YEAR: 3rd

TERM: 1nd

	WEEKLY PLANNING									
	s		TEACHING (mark X)			WEEKLY PROGRAMMING FOR STUDENT				
W E K	E S I O N	DESCRIPTION	L E C T U R E S	S E M I N A R S	FOR SESSION (Computer class room, audio-visual class room)	DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)		
	1	CHAPTER 1. INTRODUCTION TO SOLID MECHANICS Subject 1. Kinematic of deformable bodies	х			Previous reading of proposed themes Personal work about lesson	1.66			
1	2	Exercises resolution related with Subject 1		x		Personal work about Subject 1 Proposed exercises Discussion	1.66	6.5		
2	3	Subject 2. Equilibrium in deformable bodies	х			Previous reading of proposed themes Personal work about lesson	1.66			
	4	Exercises resolution related with Subject 2		x		Personal work about Subject 2 Proposed exercises Discussion	1.66	6.5		
3	5	Subject 3: Constitutive equations	х			Previous reading of proposed themes Personal work about lesson	1.66			
	6	Exercises resolution related with Subject 3		x		Personal work about Subject 3 Proposed exercises Discussion	1.66	6.5		
	7	CHAPTER 2. ELASTICITY Subject 4: Elasticity formulation	x			Previous reading of proposed themes Personal work about lesson	1.66			

	WEEKLY PLANNING									
	s		TEACHING (mark X)		SPECIAL ROOM	WEEKLY PROGRAMMING FOR STUDENT				
W E K	E S I O N	DESCRIPTION	L E C T U R E S	S E M I N A R S	FOR SESSION (Computer class room, audio-visual class room)	DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)		
4	8	Exercises resolution related with Subject 4		х		Personal work about Subject 4 Proposed exercises Discussion	1.66	6.5		
	9	Subject 5: Two dimensional theory of Elasticity (I)	х			Previous reading of proposed themes Personal work about lesson	1.66			
5	10	Exercises resolution related with Subject 5		х		Personal work about Subject 5 Proposed exercises Discussion	1.66	6.5		
	11	Subject 5: Two dimensional theory of Elasticity (II) Subject 6: Failure criteria	х			Previous reading of proposed themes Personal work about lesson	1.66			
6	12	Exercises resolution related with Subject 5 and 6		x		Personal work about Subject 5 and 6 Proposed exercises Discussion	1.66	6.5		
	13	Continuum evaluation tests	х			Previous reading of proposed themes Personal work about lesson	1.66			
7	14	Exercises resolution related with Subjects 5 and 6 Laboratory session 1		x	x	Personal work about Subject 5 and 6 Proposed exercises Discussion Work in groups Analysis of data Report writing	1.66	6.5		
	15	CHAPTER 3. Introduction to Strength of Materials Subject 7: Bending in beams (I)	х			Previous reading of proposed themes Personal work about lesson	1.66			
8	16	Laboratory session 2			x	Work in groups Analysis of data Report writing	1.66	6.5		
	17	Subject 7: Bending in beams (II)	x			Previous reading of proposed themes Personal work about lesson	1.66			

	WEEKLY PLANNING									
	s		TEACHING (mark X)			WEEKLY PROGRAMMING FOR STUDENT				
W E K	E S I O N	DESCRIPTION	L E C T U R E S	S E M I N A R S	FOR SESSION (Computer class room, audio-visual class room)	DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)		
9	18	Exercises resolution related with Subject 7		х		Personal work about Subject 9 Proposed exercises Discussion	1.66	6.5		
	19	Subject 7: Bending in beams (III)	x			Previous reading of proposed themes Personal work about lesson	1.66			
10	20	Laboratory session 3			x	Work in groups Analysis of data Report writing	1.66	6.5		
	21	Subject 8: Torsion	х			Previous reading of proposed themes Personal work about lesson	1.66			
11	22	Exercises resolution related with Subject 7				Personal work about Subject 9 Proposed exercises Discussion	1.66	6.5		
	23	Subject 9: Deflections of beams				Previous reading of proposed themes Personal work about lesson	1.66			
12	24	Exercises resolution related with Subject 8				Personal work about Subject 10 Proposed exercises Discussion	1.66	6.5		
13	25	Subject 10: Analysis of hiperstatic structures				Previous reading of proposed themes Personal work about lesson	1.66			
	26	Exercises resolution related with Subject 9 and 10				Personal work about Subject 11 Proposed exercises Discussion	1.66	6.5		
14	27	See week 7				Work in groups Analysis of data Report writing	1.66	6.5		
	28	Exercises resolution related with Subject 9 and 10				Personal work about Subject 12 Proposed exercises Discussion	1.66	0.5		

	WEEKLY PLANNING								
	s	DESCRIPTION	TEACHING (mark X)			WEEKLY PROGRAMMING FOR STUDENT			
W E K	E S I O N		L E C T U R E S	S E M I N A R S	FOR SESSION (Computer class room, audio-visual class room)	DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)	
	29	Laboratory session 4				Work in groups Analysis of data Report writing	1.66	3.25	
	Subtotal 1							94	
Total 1 (Hours of class plus student homework)								42	

15		Tutorials, handing in, etc					3.6	-
16								
17		Assessment					4	10
18								
			-			Subtotal 2	8	10
	<b>Total 2</b> (Hours of class plus student homework)						1	8

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