



SUBJECT: STABILITY AND STRUCTURAL INTEGRITY		
MASTER DEGREE: MASTER IN INDUSTRIAL MECHANICS Teacher: Josué Aranda Ruiz	ECTS: 4	QUARTER: 1

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	TOPIC 1: General subject presentation. Basic concepts on structural stability	X		NO	Independent study to reinforce the concepts taught in the classroom	1.5	2
2	2	TOPIC 2: Buckling of beams and columns	X		NO	Independent study to reinforce the concepts taught in the classroom	1.5	5
3	3	Buckling of beams and columns. Problems solving	X		NO	Problems solving	1.5	5
4	4	TOPIC 3: Buckling of simple frames	X		NO	Independent study to reinforce the concepts taught in the classroom	1.5	5
5	5	Buckling of simple frames. Problems solving	X		NO	Problems solving	1.5	5
6	6	TOPIC 4: Basic concepts on stability of plates	X		NO	Independent study to reinforce the concepts taught in the classroom	1.5	5



7	7	Basic concepts on stability of plates. Problems solving	X		NO	Problems solving	1.5	5
7		Personalized tutoring			NO		2	2
8	8	TOPIC 5: Basic concept son Fracture Mechanics. Fracture criteria of cracked solids	X		NO	Independent study to reinforce the concepts taught in the classroom	1.5	5
9	9	Fracture criteria of cracked solids. Problems solving	X		NO	Problems solving	1.5	5
10	10	TOPIC 6: Fatigue crack propagation	X		NO	Independent study to reinforce the concepts taught in the classroom	1.5	5
11	11	Fatigue crack propagation. Problems solving	X		NO	Problems solving	1.5	5
12	12	TOPIC 7: Damage tolerant design concepts	X		NO	Independent study to reinforce the concepts taught in the classroom	1.5	5
13	13	Problems solving	X		NO	Problems solving	1.5	5
13		Personalized tutoring			NO		2	2



14	14	Homework presentation	X		NO	Homework presentation	1.5	5
14		Personalized tutoring			NO		3	2
SUBTOTAL							28 + 73 = 101	
15		Additional activities (tutoring, homework presentation, ...)					1.5	
-								
16								
17		Exam						15
-								
18								
TOTAL HOURS							117.5	