

DENOMINACIÓN ASIGNATURA: ACUSTICA Y VIBRACIONES		
POSTGRADO: MÁSTER UNIVERSITARIO EN INGENIERÍA DE MÁQUINAS Y TRANSPORTES	ECTS: 60	CUATRIMESTRE: 2
Profesor/a: CRISTINA CASTEJÓN		

CRONOGRAMA DE LA ASIGNATURA (versión detallada)								
SEMANA	SESIÓN	DESCRIPCIÓN DEL CONTENIDO DE LA SESIÓN	GRUPO (marcar X)		Indicar espacio Necesario distinto aula (aula	TRABAJO DEL ALUMNO DURANTE LA SEMANA		
SEN	SE		1	2	informática, audiovisual, etc)	DESCRIPCIÓN	HORAS PRESENCIALES	HORAS TRABAJO Semana Máximo 7 H
1	1	LESSON 1 INTRODUCTION TO ACCOUSTICS AND VIBRATIONS	X			Study of the proposed topics. Review of general concepts	1,5	1
1	2	LESSON 2 FUNDAMENTALS OF ACOUSTICS (I)	Х			Study subjects. Do the exercises in class	1,5	2
2	3	LESSON 2 FUNDAMENTALS OF ACOUSTICS (II)	Х			Study subjects. Do the exercises in class	1,5	2
2	4	LESSON 2 FUNDAMENTALS OF ACOUSTICS (III). psychoacoustics	Х			Study subjects. Do the exercises in class	1,5	2
3	5	LESSON 3 ACCOUSTICS MEASUREMENTS AND SENSORS (I)	Х			Study of the elements of a measurement system for acoustic treatment	1,5	1
3	6	LESSON 3 ACCOUSTICS MEASUREMENTS AND SENSORS (II)	Х			Study of the elements of a measurement system for acoustic	1,5	2



				treatment		
4	7	PRACTICE: A CRITICAL STUDY OF FREQUENCY IN PLATES	X	practice	1,5	2
1	8	LESSON 4 NOISE CONTROL	X	Study and application of control and isolation systems for noise	1,5	2
5	9	PRACTICE: SPECTRUM ANALYZER	X	Classroom practice, use of specific equipment and work completion	1,5	1+4*
5	10	LESSON 5 ACOUSTIC REGULATIONS	X	Study points of interest applicable regulations and work completion	1,5	1+4*
j	11	LESSON 6 VIBRATIONS I	X	Study of the fundamental concepts of vibration and performing work	1,5	1+ 4*
j	12	LESSON 6. VIBRATIONS II	X	Study of the fundamental concepts of vibration	1,5	2+4*
7	13	LESSON 7 VIBRATIONS MEASUREMENTS	X	Study of the elements of a measurement system for treatment of vibration signal	1,5	2+4*
7	14	LESSON 8 VIBRATIONS IN MACHINES	Х	Study of the effect of vibrations on	1,5	2+4*



					machines		
8	15	LAB: MEASUREMENT AND TREATMENT OF VIBRATIONS IN MACHINES	X	Lab (NAVE 1.0C03)	Laboratory Practice. Signal measurement vibration test bench and conducting work	1,5	2+4*
8	16	EXERCISES: ANALYSIS OF VIBRATIONS (defectology)	Х	computer room	Perform the exercises in class and the additional proposed	1,5	2+4*
9	17	PRACTISE: ANALYSIS OF VIBRATIONS	X	computer room	Learning about using tools to extract information from the vibration signal	1,5	2+4*
9	18	LESSON 9. NON-LINEAR VIBRATIONS (I)	X		Vibration Study of grip and slip	1,5	2+4*
10	19	LESSON 9. NON-LINEAR VIBRATIONS (II)	Х		models of nonlinear vibrations	1,5	2+4*
10	20	EXERCISES: NON-LINEAR VIBRATIONS	X		Perform the exercises in class and the additional proposed	1,5	2+4*
11	21	CONFERENCES	Х		Assimilation of the contents of the talk	1,5	1
11	22	CONFERENCE	Х		Assimilation of the contents of the talk	1,5	1+4*



12	23	LESSON 10. NOISE CONTROL AND REGULTIONS	Х	E Study points of	1,5	2+4*
				interest applicable		
				regulations and work		
				completion		
12	24	LESSON 11. MODAL ANALYSIS	X	Studying the concepts	1,5	2+4*
				of modal analysis and		
				calculation		
13	25	PRESENTATIONS	Х	presentation of the	1,5	4
				reports done by		
				students		
13	26	PRESENTATIONS	X	presentation of the	1,5	1
				reports done by		
				students		
14	27	PRESENTATIONS	Х	presentation of the	1,5	1
				reports done by		
				students		
14	28	PRESENTATIONS	X	presentation of the	1,5	1
				reports done by		
				students		
		TOTAL	HORAS		42	48+60*

(*)trabajo evaluación continua