



Oterelling			RAL INI						
Studies DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERI			NG	Subject	GRAPHIC EXF	RESS	ION		
Semester	1	Course 2		Mention / Field of					
Character	BASIC TRAININ	G		specialisation					
Plan	2022	Modality Face	-to-face	Language	EUSKARA/CA	STELL	ANO		
Credits	6	Hours/week 3.83		Total hours	69 class hours hours	+ 81 n	on-cla	ss hours	= <u>150 to</u>
		2030	) AGENI	DA GOALS					
NORK AND 9 ADUSTRY, INDIVIDUAL DE GROWTH									
			PROFES	SORS					
ZUGASTI T	ESO, FELIX								
	RAZKIN, MAID	ER							
	-	REQUIRED	PREVIC		GE				
	Subj				Know	ledge			
APHIC EXPRE				()	lo previous kno			red)	
		L <u>E</u> 4	RNING	RESULTS					
	-					кс	sк	AB	ECTS
R201 - To repre fining the neces		any assembly following the	ne represe	ntation and dimensio	ning rules,		x		5,4
RTR1 - To devel	op interdisciplina	ry projects specific to the					x		0,36
		nan rights and fundamentan the SDGs - to acquire a							
ant-garde, demo	onstrating the ab	ility to work in multidiscipli							
h a high degree		deas and the arguments t	hat cuppor	t thom in an orderly	clear and		x		0,24
		ing, based on quality infor					*		0,24
		iscriminatory language							
								Total:	6
: Knowledge or Con	tent / SK: Skills / AB	Abilities							
									ECTS
NAE02 - Knowleongineering.	dge and understa	anding: A systematic unde	rstanding	of the key aspects ar	nd concepts of t	heir br	anch c	of	0,8
0 0	s in engineering:	Ability to apply their know	ledge and	understanding in ana	alysing product,	proces	ss and	l	2,36
ethod engineeri	0		-	-					
		derstanding of the differe				:			0,64 1,4
NAE14 - Practica		ngineering: Ability to com	-		0	0			0,8
AF15 - Practica		ingineering. Onderstandin	g of applied						-,-
NAE15 - Practica								Total:	6
NAE15 - Practica									
NAE15 - Practica		SECONDA	RY LEA	RNING RESULT	S				
NAE15 - Practica		SECONDA	RY LEA	RNING RESULT	S				
	_	SECONDA	RY LEA	RNING RESULT	S	_			
NAE15 - Practica	em)	SECONDA	RY LEA	RNING RESULT	S				
	em)	SECONDA	RY LEA	RNING RESULT	S				
1RGD290 (1 se	·	SECONDA	RY LEA	RNING RESULT	Сн		лсн	TI	4
1RGD290 (1 se LEARNING AC	TIVITIES	SECONDA			СН		<b>VCH</b> 3 h.	<u>– 11</u> 3	
1RGD290 (1 se LEARNING AC Carrying out/res	TIVITIES solving projects/c		provide solu	utions to problems in	СН		-		
1RGD290 (1 se LEARNING AC Carrying out/res	TIVITIES solving projects/c contexts, real ar	hallenges/cases, etc. to p	provide solu	utions to problems in	сн		-		
<b>1RGD290</b> (1 se <b>LEARNING AC</b> Carrying out/res interdisciplinary <b>EVALUATION</b> 3 Presentation an	TIVITIES solving projects/c contexts, real ar SYSTEM d defence of exe	hallenges/cases, etc. to p nd/or simulated, individual ercises, case studies,	provide solu Ily and/or ir	utions to problems in h teams	сн	3	3 h.		
<b>1RGD290</b> (1 se <b>LEARNING AC</b> Carrying out/res interdisciplinary <b>EVALUATION</b> Presentation an computer practi	TIVITIES solving projects/c contexts, real ar SYSTEM d defence of exe cal work, simulat	hallenges/cases, etc. to p nd/or simulated, individual ercises, case studies, ion practical work,	provide solu lly and/or ir W	utions to problems in h teams	сн ANISMS	3	3 h.		
<b>1RGD290</b> (1 se <b>LEARNING AC</b> Carrying out/res interdisciplinary <b>EVALUATION</b> Presentation an computer practi laboratory pract	TIVITIES solving projects/c contexts, real ar SYSTEM d defence of exe cal work, simulat ical work, term p	hallenges/cases, etc. to p nd/or simulated, individual ercises, case studies,	provide solu lly and/or ir W	utions to problems in h teams	сн ANISMS	3	3 h.		
<b>1RGD290</b> (1 se <b>LEARNING AC</b> Carrying out/res interdisciplinary <b>EVALUATION</b> Presentation an computer practi laboratory pract	TIVITIES solving projects/c contexts, real ar SYSTEM d defence of exe cal work, simulat ical work, term p	hallenges/cases, etc. to p nd/or simulated, individual ercises, case studies, ion practical work, rojects, end of degree	provide solu lly and/or ir W	utions to problems in h teams	сн ANISMS	3	3 h.		
<b>1RGD290</b> (1 se <b>LEARNING AC</b> Carrying out/res interdisciplinary <b>EVALUATION</b> Presentation an computer practi laboratory pract	TIVITIES solving projects/c contexts, real ar SYSTEM d defence of exe cal work, simulat ical work, term p s thesis, challenc	hallenges/cases, etc. to p nd/or simulated, individual ercises, case studies, ion practical work, rojects, end of degree	provide solu lly and/or ir W	utions to problems in h teams	сн ANISMS	3	3 h.		





TH - Total hours: 3 h.

(1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,					
1RGD291 (1 sem)					
LEARNING ACTIVITIES			СН	NCH	ТН
Carrying out/resolving projects/challenges/cases, etc. to p			•	3 h.	3 h.
interdisciplinary contexts, real and/or simulated, individua					
EVALUATION SYSTEM	100%	MAKE-UP MECHANI		aniamal	
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	100 %		(No mech	anisnis)	
CH - Class hours: 0 h. ICH - Non-class hours: 3 h. 'H - Total hours: 3 h.					
1RGD293 (1 sem)					
LEARNING ACTIVITIES			СН	NCH	тн
Carrying out/resolving projects/challenges/cases, etc. to p interdisciplinary contexts, real and/or simulated, individua			1 h.	2 h.	3 h.
EVALUATION SYSTEM	W	MAKE-UP MECHANI	SMS		
computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems CH - Class hours: 1 h. ICH - Non-class hours: 2 h. TH - Total hours: 3 h.					
	junto mec	cánico y sus piezas (me			
LEARNING ACTIVITIES			etálicas y ma CH 27 h.	ateriales plási NCH 30 h.	ticos) TH 57 h.
LEARNING ACTIVITIES Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experir	ns, audiovis	sual material, etc. on	сн	ИСН	тн
LEARNING ACTIVITIES Development and writing of records, reports, presentation	ns, audiovis nental inve	sual material, etc. on stigations carried out	СН 27 h.	ИСН	тн
LEARNING ACTIVITIES Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experir individually and/or in teams Conducting tests, giving presentations, presenting defence checkpoints	ns, audiovis nental inve	sual material, etc. on stigations carried out examinations and/or doir	<u>СН</u> 27 h. ng 3 h.	ИСН	<i>TH</i> 57 h.
LEARNING ACTIVITIES Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Reports on the completion of exercises, case studies,	ns, audiovis nental inve ces, taking (	sual material, etc. on stigations carried out	CH 27 h. ng 3 h. SMS etion of exer exercises, la	NCH 30 h. cises, case stu boratory exerc	TH 57 h. 3 h.
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams Conducting tests, giving presentations, presenting defend checkpoints <b>EVALUATION SYSTEM</b> Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory	ns, audiovis nental inve ces, taking o <u>W</u>	sual material, etc. on stigations carried out examinations and/or doir MAKE-UP MECHANI Reports on the comple exercises, simulation	CH 27 h. ng 3 h. SMS etion of exer exercises, la	NCH 30 h. cises, case stu boratory exerc	TH 57 h. 3 h.



EARNING ACTIVITIES			СН	NCH	ТН
carrying out/resolving projects/challenges/cases, etc. to terdisciplinary contexts, real and/or simulated, individu			2 h.	1 h.	3 h.
VALUATION SYSTEM	W	MAKE-UP MECHAN	IISMS		
eports on the completion of exercises, case studies, omputer exercises, simulation exercises, laboratory xercises, term projects, challenges and problems	100%		(No mech	anisms)	
- Total hours: 3 h.					
EARNING ACTIVITIES			СН	псн	тн
EARNING ACTIVITIES Conducting tests, giving presentations, presenting defer	nces, taking	examinations and/or do		<b>NCH</b> 2 h.	<i>ТН</i> 3 h.
EARNING ACTIVITIES Conducting tests, giving presentations, presenting defer theckpoints EVALUATION SYSTEM	w	examinations and/or do	ing <sup>1 h.</sup>	2 h.	
LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defer checkpoints EVALUATION SYSTEM ndividual written and/or oral tests or individual	-		ing <sup>1 h.</sup>	2 h.	
IRGD294 (1 sem) LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defer checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests	w		ing <sup>1 h.</sup>	2 h.	

LEARNING ACTIVITIES			••••		
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experient individually and/or in teams			32 h.	40 h.	72 h.
Conducting tests, giving presentations, presenting defend checkpoints	ces, taking	examinations and/or doing	g 3h.		3 h.
EVALUATION SYSTEM	W	MAKE-UP MECHANIS	MS		
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	40%	Individual written and/o coding/programming te		or individual	
Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems	20%				
Individual written and/or oral tests or individual coding/programming tests	40%				
CH - Class hours: 35 h. NCH - Non-class hours: 40 h. TH - Total hours: 75 h.					





## CONTENTS

Mechanical assembly:3 mechanical assemblies will be worked on:Mechanical elements, dimensioning and toler ances.Representation of partssurfaces

## LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources
[!] Apuntes de la asignatura

Bibliography http://katalogoa.mondragon.edu/janium-bin/janium\_login\_opac\_re\_ln k.pl?grupo=DISINDUSTRIAL&ejecuta=15