



	[G		N OF EL		RODUCIS	ð 		
		GENI	ERAL IN	-ORMATION				
Studies	DEGREE IN IND PRODUCT DEVE	USTRIAL DESIGN AND ELOPMENT ENGINEER) RING	Subject	PROJECT			
Semester	2	Course 2		Mention / Field of				
Character	COMPULSORY			specialisation				
Plan	2022	Modality Face	e-to-face	Language	EUSKARA/CAS	TELLANO		
Credits	3	Hours/week 2.78		Total hours	50 class hours + hours	⊦ 25 non-cla	ass hours	= <u>75 tot</u>
		203	0 AGENI	DA GOALS				
BREARD GOUTH 9 ADDREASTICCTURE								
TOPPECI			PROFES	SSORS				
TORRESL	OZANO, ASIER	REQUIRED		US KNOWLED	GF			
	Subie	ects			Knowl	edge		
(No	o specific previous	subjects required)		(No previous knov	vledge requ	ired)	
````				RESULTS			·	
						KC SK	AB	ECT
R209 - To asse	mble, analyze, so	lve and simulate electric	cal circuits a	ind devices		<u>x</u>		2,6
<b>TR1</b> - To deve coming aware o pact of the prop int-garde, dem in a high degree	lop interdisciplinar of respect for huma losed solutions on onstrating the abili e of autonomy	y projects specific to the an rights and fundamen the SDGs - to acquire a ity to work in multidiscip	eir specialty tal rights, ar and/or apply linary teams	and of gradual com nd analyzing and ass v basic, advanced ar s and/or undertake fr	plexity, - sessing the nd/or urther studies	x		0,24
erent manner, irces, using inc	ess information, id orally and in writir clusive and non-dis	eas and the arguments ng, based on quality info scriminatory language	that suppor prmation, se	t them in an orderly, If-made or obtained	clear and from different	x		0,16
Knowledge or Col	ntent / SK: Skills / AB: ,	Abilities					Total:	3
AEE LEARNI	NG RESULTS							ECTS
IAE05 - Analysi gineering probl	s in engineering: A lems using establis	Ability to apply their know shed methods.	wledge and	understanding in ide	entifying, formula	ting and sol	ving	0,4
IAE06 - Analysi ethod engineer	s in engineering: A ing.	Ability to apply their know	wledge and	understanding in an	alysing product,	process and	ł	0,4
IAE11 - Resear	ch & innovation: A	bility to design and carr	y out experi	iments, to interpret d	lata and draw cor	nclusions.		0,2
IAE16 - Practica	al application of er	ngineering: To be aware	of the impli	ications of the practi	cal application of	engineering	g.	0,8
IAE17 - Transve	ersal competences	s: To work effectively, be	oth individua	ally and in a team.				0,6
d society in gen	ersal competences neral.	s: To use different metho	ods to comr	nunicate effectively	with the engineer	ing commu	nity	0,4
IAE21 - Transve	ersal competences	s: To recognise the need	d for and be	e able to voluntarily d	levelop continuou	is learning.		0,2
		SECOND			re		Total:	3
		SECONDA	ARTLEA	RNING RESUL	3			
	>							
(2 S	em)							
LEARNING AC	TIVITIES				СН	NCH	Tŀ	1
Seminars, deba	ates and/or worksh	nops to deepen and/or s	hare experi	ences.	1 h.	1 h.	21	۱.
	SYSTEM		W		ANISMS			
Presentation ar	nd defence of exer ical work, simulation tical work, term pro-	rcises, case studies, on practical work, ojects, end of degree	100%	Presentation and practical work, sin term projects, end	defence of exerc nulation practical of degree project	ises, case s work, labor ct, master's	atudies, co atory prac thesis, ch	mputer ctical wo
project, master	s mesis, challenge	es and problems		and problems				0





TH - Total hours: 2 h.

LEARNING ACTIVITIES			СН	NCH	тн
Seminars, debates and/or workshops to deepen and/or s	nare experi	ences.	1 h.	1 h.	2 h.
EVALUATION SYSTEM	W	MAKE-UP MECHA	NISMS		
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	100%	Presentation and de practical work, simu term projects, end c and problems	efence of exerc Ilation practical of degree project	ises, case stur work, laborato ct, master's the	dies, compute ory practical w esis, challenge
1 - Class hours: 1 h.					
UH - Non-class hours: 1 h. I - Total hours: 2 h.					
CH - Non-class hours: 1 h. H - Total hours: 2 h.					
CH - Non-class hours: 1 h. 1 - Total hours: 2 h. 2RGD291 (2 sem)			СН	NCH	TH
RGD291 (2 sem) EARNING ACTIVITIES Seminars, debates and/or workshops to deepen and/or si	nare experi	ences.	<u>СН</u> 1 h.	<u>NCH</u> 1 h.	<u>тн</u> 2 h.
CH - Non-class hours: 1 h. 1 - Total hours: 2 h. RGD291 (2 sem) LEARNING ACTIVITIES Seminars, debates and/or workshops to deepen and/or si EVALUATION SYSTEM	nare experi W	ences.	<u>СН</u> 1 h. NISMS	<u>NCH</u> 1 h.	<u>ТН</u> 2 h.
CH - Non-class hours: 1 h. 1 - Total hours: 2 h. ERGD291 (2 sem) LEARNING ACTIVITIES Seminars, debates and/or workshops to deepen and/or st EVALUATION SYSTEM Presentation and defence of exercises, case studies, computer practical work, simulation practical work, aboratory practical work, term projects, end of degree project, master's thesis, challenges and problems	nare experi W 100%	ences. MAKE-UP MECHA Presentation and de practical work, simu term projects, end c and problems	CH 1 h. NISMS efence of exerc alation practical of degree project	NCH 1 h. ises, case stur work, laborato ct, master's the	TH 2 h. dies, compute bry practical w esis, challenge

RGD215 [!] Makina elektriko birakariak diseinatu eta dimentsionatzeko gaitasuna

LEARNING ACTIVITIES			СН	NCH	тн
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experir individually and/or in teams	9 h.	10 h.	19 h.		
Presentation by the teacher in the classroom, in participal procedures associated with the subjects	tory classe	es, of concepts and	12 h.		12 h.
Practical work in workshops and/or laboratories, individually and/or in teams					4 h.
EVALUATION SYSTEM	MAKE-UP MECHANI	SMS			
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	40%	Presentation and defe practical work, simula term projects, end of and problems	ence of exerc tion practical degree projec	ises, case stue work, laborato ct, master's the	dies, computer ory practical work, esis, challenges
Individual written and/or oral tests or individual coding/programming tests	60%	Individual written and, coding/programming	or oral tests tests	or individual	
CH - Class hours: 25 h. NCH - Non-class hours: 10 h. TH - Total hours: 35 h.					



## 2RGD293 (2 sem)

Seminars, debates and/or workshops to deepen and/or sh	iences.	1 h.	1 h.	2 h.	
EVALUATION SYSTEM	W	MAKE-UP MECH	IANISMS		
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	100%	Presentation and practical work, sir term projects, end and problems	defence of exerc mulation practical d of degree proje	ises, case stud work, laborato ct, master's the	Jies, computer ory practical work osis, challenges

## RGD214 [!] Zirkuitu magnetikoak eta transformadoreak diseinatu eta dimentsionatzeko gaitasuna

LEARNING ACTIVITIES	СН	NCH	ТН		
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams	7 h.	10 h.	17 h.		
Presentation by the teacher in the classroom, in participal procedures associated with the subjects	9 h.		9 h.		
Practical work in workshops and/or laboratories, individua	4 h.		4 h.		
EVALUATION SYSTEM W MAKE-UP MECHAN			SMS		
Presentation and defence of exercises, case studies, computer practical work, simulation practical work, aboratory practical work, term projects, end of degree project, master's thesis, challenges and problems		Presentation and defe practical work, simula term projects, end of and problems	ence of exerc tion practica degree proje	cises, case stud work, laborato ct, master's the	dies, computer ory practical work, esis, challenges
ndividual written and/or oral tests or individual 60% Individual written and coding/programming tests coding/programming		or oral tests	or individual		

CH - Class hours: 20 h. NCH - Non-class hours: 10 h. TH - Total hours: 30 h.

2RGD292 (2 sem)						
LEARNING ACTIVITIES			СН	NCH	ТН	
Carrying out/resolving projects/challenges/cases, etc. to p interdisciplinary contexts, real and/or simulated, individual EVALUATION SYSTEM	utions to problems in n teams MAKE-UP MECHANI	1 h. SMS	1 h.	2 h.		
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems		(No mech	anisms)			
CH - Class hours: 1 h. NCH - Non-class hours: 1 h. TH - Total hours: 2 h.						

CONTENTS





1.Theoretical objectives- Direct Current- Alternating Current2.Transformers3.Electrical Machines4.Electri cal components5.Power Converters and Entrepreneurs

Learning resources	Bibliography				
[!] Apuntes de la asignatura	Platt, C., "Encyclopedia of Electronic Components",				
[!] Laboratorios					
<ol> <li>Realización de prácticas en laboratorio</li> </ol>	Platt, C., "Encyclopedia of Electronic Components"				
[!] Transparencias de la asignatura	Vol. 2, O'REILLY				
	Platt, C., "Encyclopedia of Electronic Components", Vol. 3, O'REILLY				
	Sinclair, I., "Electronics Simplified", Third edition, Newnes				
	Sangwine, S., "Electronic Components and Technology", Third edition, CRC Press				