

Mondragon Unibertsitatea Goi Eskola Politeknikoa Escuela Politécnica Superior

		[GEH302] ELECTRO						
Studios D		GENERAL IN STRIAL ELECTRONICS	FORMATION	ANALOGUE E			c	
	NGINEERING	STRIAL ELECTRONICS	Subject	ANALOGUE	LECIT		5	
Semester 2		Course 2	Mention / Field of					
Character CC			specialisation					
Plan 20 Credits 4.5		Modality Face-to-face Hours/week 3.99		EUSKARA/CA 71.77 class ho			on alaaa l	houro – 11
Credits 4,	J	Hours/week 5.99	Total nours	total hours	Jui 5 + 4	0.751	011-01855 1	10015 = 1
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EARNING RESULT	rs	LLARNING	RESOLIS		КС	SK	AB	ECTS
ER209 - To know th	e fundamentals	of electronics; electronic technolo projects specific to their specialt			x	x		4,02 0,32
	strating the ability							
-RTR2 - To express oherent manner, or	information, ide ally and in writing	y to work in multidisciplinary team as and the arguments that suppo g, based on quality information, s	ort them in an orderly,	clear and		x		0,16
-RTR2 - To express oherent manner, ora	information, ide ally and in writing	as and the arguments that suppo	ort them in an orderly,	clear and		x	Total:	0,16
-RTR2 - To express oherent manner, ora ources, using inclus	information, ide ally and in writing sive and non-disc	as and the arguments that suppo g, based on quality information, s criminatory language	ort them in an orderly,	clear and		x	Total:	·
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2RGE292 (2 sem)

LEARNING ACTIVITIES			СН	NCH	тн	
Carrying out/resolving projects/challenges/cases, etc. to pro interdisciplinary contexts, real and/or simulated, individually			1,34 h.	,66 h.	2 h.	
EVALUATION SYSTEM	w	MAKE-UP MECHANI	SMS			
Observation (technical capacity, attitude and participation)	100%	Observation (technical Comments: Continuor		•	ticipation)	
CH - Class hours: 1,34 h. NCH - Non-class hours: ,66 h. TH - Total hours: 2 h.						

RGE220 [!] Analiza fuentes de alimentación lineales, circuitos con transistores en conmutación y sistemas optoelectrónicos

LEARNING ACTIVITIES			СН	NCH	TH
Conducting tests, giving presentations, presenting de checkpoints	fences, taking	examinations and/or doing	2 h.	2 h.	4 h.
Presentation by the teacher in the classroom, in partic procedures associated with the subjects	cipatory classe	es, of concepts and	15 h.	9 h.	24 h.
Carrying out exercises and solving problems individua	ally and/or in te	eams	6 h.	3 h.	9 h.
EVALUATION SYSTEM	W	MAKE-UP MECHANISM	IS		
Individual written and/or oral tests or individual coding/programming tests Comments: - Control point: minimum grade 5.	100%	Individual written and/or oral tests or individual coding/programming tests Comments: - Students with less than a 5 at the control point m retake the exam Final note of the control point: control point 25 and retake 75%.			

CH - Class hours: 23 h. NCH - Non-class hours: 14 h. TH - Total hours: 37 h.

2RGE293 (2 sem)					
LEARNING ACTIVITIES			СН	NCH	ТН
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experim individually and/or in teams			1,34 h.	,66 h.	2 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	100%	Reports on the comple exercises, simulation e projects, challenges an Comments: - Continue the document.	xercises, lab Id problems	oratory exerci	ses, term
CH - Class hours: 1,34 h. NCH - Non-class hours: ,66 h. TH - Total hours: 2 h.					

RGE219 [!] Analiza circuitos electrónicos con amplificadores operacionales reales y circuitos osciladores de baja frecuencia



Goi Eskola Politeknikoa | Mondragon Unibertsitatea

Course: 2024 / 2025 - Course planning



EARNING ACTIVITIES			СН	NCH	тн
Conducting tests, giving presentations, presenting defences heckpoints	s, taking	examinations and/or doing		2 h.	4 h.
Presentation by the teacher in the classroom, in participator rocedures associated with the subjects	y classe	es, of concepts and	19 h.	9,5 h.	28,5 h.
Carrying out exercises and solving problems individually an	d/or in te	eams	6 h.	3 h.	9 h.
VALUATION SYSTEM	W	MAKE-UP MECHANISM	NS		
ndividual written and/or oral tests or individual oding/programming tests comments: - Control point: minimum grade 5.	100%	Individual written and/or coding/programming tes Comments: - Students v retake the exam Final n and retake 75%.	sts with less th	nan a 5 at the d	
CH - Non-class hours: 14,5 h. I - Total hours: 41,5 h.					
I - Total hours: 41,5 h.			сн	псн	тн
I - Total hours: 41,5 h.			<u>СН</u> 2 h.	<u>ИСН</u> 1 h.	<i>TH</i> 3 h.
RGE291 (2 sem) EARNING ACTIVITIES Carrying out/resolving projects/challenges/cases, etc. to pro			2 h.		
RGE291 (2 sem) EARNING ACTIVITIES Carrying out/resolving projects/challenges/cases, etc. to pro interdisciplinary contexts, real and/or simulated, individually	and/or i	in teams	2 h. MS capacity, at	1 h. ttitude and par	3 h.

EVALUATION SYSTEM	w	MAKE-UP MECHAN	SMS		
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems Individual written and/or oral tests or individual	20%	Prototype / Product Comments: - In the p the individual defense.		nere will not b	e any retake of
coding/programming tests Prototype / Product	30%				
Comments: - PBL project grade: 30% product, 20% tech ontent of the report and 50% individual technical defense					

LEARNING ACTIVITIES CH NCH TH Development and writing of records, reports, presentations, audiovisual material, etc. on 1,34 h. ,66 h. 2 h.





projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

EVALUATION SYSTEM	W	MAKE-UP MECHANISI	NS		
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 defend practical work, simulation term projects, end of de and problems Comments: - Continuou	n practical gree projec	work, laborato t, master's the	ry practical work,
CH - Class hours: 1,34 h. NCH - Non-class hours: ,66 h. TH - Total hours: 2 h.					
2RGE290 (2 sem) LEARNING ACTIVITIES Carrying out/resolving projects/challenges/cases, etc. to pro	ovide solu	itions to problems in	<u>СН</u> 2 h.	NCH 1 h.	<i>TH</i> 3 h.
interdisciplinary contexts, real and/or simulated, individually	y and/or ir	teams			
EVALUATION SYSTEM	W	MAKE-UP MECHANISI	NS		
Observation (technical capacity, attitude and participation)	100%	Observation (technical o Comments: Continuous			icipation)
CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.					
	CONTR	INTS			

1. REAL OPERATIONAL AMPLIFIERS

- 2. OSCILATORS
- 3. LINEAR POWER SOURCES
- 4. COMMUTATION OPERATING TRANSISTORS
- 5. OPTOELECTRONICS

LEARNING RESOURCES AND BIBLIOGRAPHY				
Learning resources	Bibliography			
Labs Moodle Platform	Malvino, Albert Paul. Principios de electrónica 6 ed. McGraw Hill. Madrid. 2000. ISBN 84-481-2568-1			
Subject notes	Torres Portero, M. Circuitos integrados lineales y sus aplicaciones. Paraninfo. 1984. ISBN 84-283-1345-8			
	Faulkenberry, Luces M. Introducción a los amplificadores operacionales con aplicaciones a CI lineales. Noriega Editores. ISBN 968-18-3312-0			
	Rashid, Muhammad H. Microelectronics circuits - Analysis and design. Cengage Learning. ISBN 978-0-495-66772-8			