

## Goi Eskola Politeknikoa | Mondragon Unibertsitatea Course: 2023 / 2024 - Course planning

Mondragon Unibertsitatea Goi Eskola Politeknikoa Escuela Politécnica Superior

[GAI207] E	LECTRICAL PO						
	GENE	RAL INI	FORMATION				
Studies DEGREE IN EN	ERGY ENGINEERING	_	Subject	?	_	_	_
Semester 2	Course 3		Mention / Field of				
Character COMPULSORY			specialisation				
Plan 2022	Modality Face	-to-face	Language				
Credits 4,5	Hours/week 2.06		Total hours	37 class hours - hours	+ 75.5 non-cla	ass hours	= <u>112.5 t</u>
		PROFES	SSORS				
GARAYALDE PEREZ, ERIK		DDEVIC		05			
Subi		PREVIC			odgo		
Subj (No specific previou			()	Knowl	-	red)	
	• • •		RESULTS		mouge require	ou)	
		ANNING	RESULTS		кс ѕк	AB	ECTS
EARNING RESULTS AR305 - Designs electrical energy	generation and transport	tation syste	ems		x		3,78
RTR1 - To develop interdisciplina ecoming aware of respect for hum pact of the proposed solutions or rant-garde, demonstrating the abi th a high degree of autonomy	ry projects specific to the nan rights and fundament n the SDGs - to acquire a	ir specialty al rights, ai nd/or apply	and of gradual comp nd analyzing and ass / basic, advanced an	essing the d /or	x		0,4
-RTR2 - To express information, ic oherent manner, orally and in writ ources, using inclusive and non-d	ing, based on quality infor				x		0,32
						Total:	4,5
C: Knowledge or Content / SK: Skills / AB.			RNING RESULT				
<b>RGA390</b> [!] Definir y gestional conocimientos de tecnologías e definir una estrate	r los objetivos y la plani	ficación d					o- y
conocimientos de tecnologías e definir una estrate	r los objetivos y la plani	ficación d					o- y
conocimientos de tecnologías e	r los objetivos y la plani específicas de su espec	ficación d ialidad,- q	ue en ocasiones lle	gan a la vangu	ardia del con	nocimient	o- y
conocimientos de tecnologías e definir una estrate LEARNING ACTIVITIES	r <b>los objetivos y la plani</b> específicas de su espec	ficación d ialidad,- q s, audiovis	ue en ocasiones lle	gan a la vangu CH	ardia del con	nocimient TH	o- y
Conocimientos de tecnologías de definir una estrate LEARNING ACTIVITIES Development and writing of reco projects/work experience/challer	r <b>los objetivos y la plani</b> específicas de su espec	ficación d ialidad,- q s, audiovis	ue en ocasiones lle	gan a la vangu CH	ardia del con	nocimient TH	o- y
Conocimientos de tecnologías e definir una estrate LEARNING ACTIVITIES Development and writing of reco projects/work experience/challer individually and/or in teams	r los objetivos y la plani específicas de su espec ords, reports, presentation nges/case studies/experin ercises, case studies, exercises, laboratory	<i>ficación d</i> <i>ialidad,- q</i> s, audiovis nental inve	ue en ocasiones lle sual material, etc. on stigations carried out	gan a la vangu Сн ANISMS defence of exerci	NCH 4 h. Lises, case stu	TH 4 h. udies, corr	nputer cal work,
<b>LEARNING ACTIVITIES</b> Development and writing of recorrector         projects/work experience/challer         individually and/or in teams <b>EVALUATION SYSTEM</b> Reports on the completion of excomputer exercises, simulation of exercises, term projects, challen <b>CH - Class hours:</b> 0 h. <b>CH - Non-class hours:</b> 4 h.	r los objetivos y la plani específicas de su espec ords, reports, presentation nges/case studies/experin ercises, case studies, exercises, laboratory	ficación d ialidad,- q s, audiovis nental inve W	ue en ocasiones lle sual material, etc. on stigations carried out <u>MAKE-UP MECH</u> . Presentation and o practical work, sim term projects, end	gan a la vangu Сн ANISMS defence of exerci	NCH 4 h. Lises, case stu	TH 4 h. udies, corr	nputer cal work,
<b>CONOCIMIENTOS DE TECNOLOGÍAS E LEARNING ACTIVITIES</b> Development and writing of recorrigion projects/work experience/challer         individually and/or in teams <b>EVALUATION SYSTEM</b> Reports on the completion of excorputer exercises, simulation exercises, term projects, challen <b>CH - Class hours:</b> 0 h. <b>CH - Non-class hours:</b> 4 h.	r los objetivos y la plani específicas de su espec ords, reports, presentation nges/case studies/experin ercises, case studies, exercises, laboratory	ficación d ialidad,- q s, audiovis nental inve W	ue en ocasiones lle sual material, etc. on stigations carried out <u>MAKE-UP MECH</u> . Presentation and o practical work, sim term projects, end	gan a la vangu Сн ANISMS defence of exerci	NCH 4 h. Lises, case stu	TH 4 h. udies, corr	nputer cal work
<b>CONDECTIVITIES LEARNING ACTIVITIES</b> Development and writing of record projects/work experience/challer individually and/or in teams <b>EVALUATION SYSTEM</b> Reports on the completion of excord projects, term projects, challen         CH - Class hours: 0 h.         CH - Non-class hours: 4 h.         TH - Total hours: 4 h.         REGA391 [!] Coordinar el equiptorsonas y su contribución partoroyecto en	r los objetivos y la plani específicas de su espec ords, reports, presentation nges/case studies/experin ercises, case studies, exercises, laboratory ges and problems	ficación d ialidad,- q s, audiovis nental inve <u>W</u> 100%	ue en ocasiones lle sual material, etc. on stigations carried out MAKE-UP MECH. Presentation and o practical work, sim term projects, end and problems	gan a la vangu CH ANISMS defence of exerc iulation practica of degree proje	Ardia del con NCH 4 h. tises, case stu l work, labora ct, master's th ntegración de grupal, para	TH 4 h. udies, com tory practi hesis, chal	nputer cal work, lenges
<b>EXAMPLE 1 LEARNING ACTIVITIES</b> Development and writing of record projects/work experience/challer individually and/or in teams <b>EVALUATION SYSTEM</b> Reports on the completion of excord projects, kern projects, challen         CH - Class hours: 0 h.         CH - Non-class hours: 4 h.         CH - Total hours: 4 h.         CH - Class hours: 0 h.         CCH - Non-class hours: 0 h.         CCH - Non-class hours: 4 h.         CH - Total hours: 4 h.         CH - Total hours: 4 h.         CH - Total hours: 4 h.         CH - Non-class hours: 5 hours: 4 h.         CH - Total hours: 4 h.         CH - Total hours: 4 h.         CH - Total hours: 4 h.	r los objetivos y la plani específicas de su espec ords, reports, presentation nges/case studies/experin ercises, case studies, exercises, laboratory ges and problems	ficación d ialidad,- q s, audiovis nental inve <u>W</u> 100%	ue en ocasiones lle sual material, etc. on stigations carried out MAKE-UP MECH. Presentation and o practical work, sim term projects, end and problems	Gan a la vangu CH ANISMS defence of exerc nulation practica of degree proje	NCH 4 h. 5 ses, case stu 1 work, labora ct, master's th ntegración de grupal, para	TH 4 h. udies, com tory practi nesis, chal e todas la el desarr	nputer cal work, lenges
Conocimientos de tecnologías e definir una estrate         LEARNING ACTIVITIES         Development and writing of recorrojects/work experience/challer individually and/or in teams         EVALUATION SYSTEM         Reports on the completion of excorputer exercises, simulation e exercises, term projects, challen         CH - Class hours: 0 h.         NCH - Non-class hours: 4 h.         TH - Total hours: 4 h.         RGA391       [!] Coordinar el equiptorsonas y su contribución partoroyecto en	r los objetivos y la plani específicas de su espec ords, reports, presentation nges/case studies/experin ercises, case studies, exercises, laboratory ges and problems	ficación d ialidad,- q s, audiovis nental inve <u>W</u> 100% do la cohe nto apropia	ue en ocasiones lle sual material, etc. on stigations carried out MAKE-UP MECH. Presentation and o practical work, sim term projects, end and problems	Gan a la vangu CH ANISMS defence of exerc inulation practica of degree proje	Ardia del con NCH 4 h. tises, case stu l work, labora ct, master's th ntegración de grupal, para	TH 4 h. udies, com tory practi hesis, chal	nputer cal work, lenges



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Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems 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

CH - Class hours: 0 h. NCH - Non-class hours: 3 h. TH - Total hours: 3 h.

**RGA392** [!] Identificar y argumentar de forma precisa los ODS en los que incide el proyecto realizado, aportando posibles acciones para la mejora.

100%

LEARNING ACTIVITIES			СН	NCH	тн
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams			-	3 h.	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	100%	Presentation and defer practical work, simulation term projects, end of def and problems	on practical	work, laborate	ory practical wor
CH - Class hours: 0 h. NCH - Non-class hours: 3 h. TH - Total hours: 3 h.					
<b>RGA393</b> [!] Elabora la memoria del proyecto, aportan discriminatorio del lenguaje.	do argum	entos elaborados y haci	endo un us	o correcto, il	nclusivo y no
discriminatorio del lenguaje.	do argumo	entos elaborados y haci	endo un us CH	o correcto, ir	nclusivo y no TH
	s, audiovis	ual material, etc. on			-
discriminatorio del lenguaje.         LEARNING ACTIVITIES         Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin	s, audiovis	ual material, etc. on	сн	ЛСН	тн
discriminatorio del lenguaje. LEARNING ACTIVITIES Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams	s, audiovis nental inve	ual material, etc. on stigations carried out	CH MS acce of exerc on practical	NCH 4 h. ises, case stur work, laborato	тн 4 h. dies, computer pry practical wor
discriminatorio del lenguaje.         LEARNING ACTIVITIES         Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams         EVALUATION SYSTEM         Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems         CH - Class hours: 0 h.         NCH - Non-class hours: 4 h.	is, audiovis nental inve	ual material, etc. on stigations carried out MAKE-UP MECHANIS Presentation and defer practical work, simulatio term projects, end of de	CH MS acce of exerc on practical	NCH 4 h. ises, case stur work, laborato	тн 4 h. dies, computer pry practical wor
discriminatorio del lenguaje.         LEARNING ACTIVITIES         Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams         EVALUATION SYSTEM         Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory	is, audiovis nental inve	ual material, etc. on stigations carried out MAKE-UP MECHANIS Presentation and defer practical work, simulatio term projects, end of de	CH MS acce of exerc on practical	NCH 4 h. ises, case stur work, laborato	тн 4 h. dies, computer pry practical wor

**RGA394** [!] Realiza una presentación oral del proyecto, justificando las soluciones propuestas con argumentos elaborados y precisos, y haciendo un uso correcto, inclusivo y no discriminatorio del lenguaje.

LEARNING ACTIVITIES		СН	NCH	тн
Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams			4 h.	4 h.
EVALUATION SYSTEM	W	MAKE-UP MECHANISMS		
Reports on the completion of exercises, case studies,	100%	Presentation and defence of exerc	cises, case stud	dies, computer

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computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems

CH - Class hours: 0 h. NCH - Non-class hours: 4 h. TH - Total hours: 4 h.

EARNING ACTIVITIES			СН	NCH	ТН
Conducting tests, giving presentations, presenting defend checkpoints	ces, taking	examinations and/or doing	1 h.	5 h.	6 h.
Presentation by the teacher in the classroom, in participa procedures associated with the subjects	tory classe	es, of concepts and	2 h.		2 h.
Carrying out exercises and solving problems individually	and/or in t	eams	4 h.	5 h.	9 h.
EVALUATION SYSTEM	W	MAKE-UP MECHANIS	IS		
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	70%	Individual written and/or coding/programming tes		or individual	
Individual written and/or oral tests or individual coding/programming tests	30%				

LEARNING ACTIVITIES			СН	NCH	ТН
Conducting tests, giving presentations, presenting defend checkpoints	es, taking	examinations and/or doing	2 h.	4 h.	6 h.
Computer simulation exercises, individually and/or in teams			4 h.	8 h.	12 h.
Presentation by the teacher in the classroom, in participa procedures associated with the subjects	10 h.		10 h.		
Carrying out exercises and solving problems individually	and/or in te	eams	12 h.	8,5 h.	20,5 h.
EVALUATION SYSTEM	w	MAKE-UP MECHANISM	IS		
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	30%	Individual written and/or coding/programming test		or individual	
	70%				

 RGA316
 [!] Diseña sistemas de generación conectados a la red eléctrica

 LEARNING ACTIVITIES
 CH
 NCH
 TH



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Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams			27 h.	27 h.
Presentation by the teacher in the classroom, in participa procedures associated with the subjects	tory classe	s, of concepts and 2 h.		2 h.
EVALUATION SYSTEM	W	MAKE-UP MECHANISMS		
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 defence of exercis practical work, simulation practical w term projects, end of degree project and problems	vork, laborato	ry practical work,
CH - Class hours: 2 h. NCH - Non-class hours: 27 h. TH - Total hours: 29 h.				

## CONTENTS

## LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
Subject notes	http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_ln
Moodle Platform	k.pl?grupo=ENERGIA32&ejecuta=20
Topic related web quires	
Video projections	
Specific Master Software	
Slides of the subject	
Class presentations	