



		FORMATION					
Studies DEGREE IN INDU ENGINEERING	STRIAL ORGANIZATION	Subject	MATERIAL ENG	INEE	RING	AND SC	IENCE
Semester 1 Character COMPULSORY	Course 2	Mention / Field of specialisation					
Plan 2022	Modality Face-to-face	Language	EUSKARA/CAST	ELL/	ANO		
Credits 6	Hours/week 3.67		66 class hours + <u>hours</u>	84 no	on-clas	s hours	= <u>150 tot</u>
	2030 AGEN	DA GOALS					
Structure and St							
	PROFE	SSORS					
SARRIONANDIA ARIZNABAR	RETA, MARIASUN						
IBARRETXE LOPEZ, UNAI							
GOMEZ SAGARZAZU, MIREN							
URIBE AZKARRETA, MAITAN			~ -				
• • • •							
Subjec	ts		Knowle	_			
HEMISTRY		•	No previous knowl	eage	requir	ea)	
	LEARNING	RESULTS		<i>(</i> 0	011	15	5050
EARNING RESULTS				KC	SK	AB	ECTS
OR208 - To distinguish the different	types of materials, understanding	the fundamentals of	science.		x		5,4
OR208 - To distinguish the different echnology and chemistry of materials ynthesis or processing and the prop	s, taking into account the relation				x		5,4
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1RGO291 (1 sem)





LEARNING ACTIVITIES			СН	NCH	ТН	
Carrying out/resolving projects/challenges/cases, etc. to p interdisciplinary contexts, real and/or simulated, individua			2 h.	1 h.	3 h.	
EVALUATION SYSTEM	W	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	100%		(No mech	anisms)		
CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.						

RGO218 [!]	Calcula las dimensiones de elementos estructurales simples sometidos a cargas estáticas bajo criterios de rigidez
y resistencia	

Presentation by the teacher in the classroom, in participatory classes, of concepts an procedures associated with the subjects Carrying out exercises and solving problems individually and/or in teams	nd 14 h.	2 h.	16 h.
Carrying out exercises and solving problems individually and/or in teams			
	6 h.	11 h.	17 h.
EVALUATION SYSTEM W MAKE-UP MI	ECHANISMS		
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems 20% Individual writ coding/progra	tten and/or oral tests o amming tests	or individual	
Individual written and/or oral tests or individual 80% coding/programming tests			

1RG0292 (1 sem)						
LEARNING ACTIVITIES			СН	NCH	тн	
Carrying out/resolving projects/challenges/cases, etc. to p interdisciplinary contexts, real and/or simulated, individua		•	2 h.	1 h.	3 h.	
EVALUATION SYSTEM	W	MAKE-UP MECHANI	SMS			
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems CH - Class hours: 2 h. NCH - Non-class hours: 1 h.	100%		(No mech	anisms)		
TH - Total hours: 3 h.						
						_
RG0217 [!] Selecciona los materiales más adecuados establecidas por el cliente	s para poc	der fabricar el producto	dentro de la	as especificad	ciones	

LEARNING ACTIVITIES

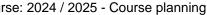
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Goi Eskola Politeknikoa | Mondragon Unibertsitatea Course: 2024 / 2025 - Course planning





Development and writing of records, reports, presentatio projects/work experience/challenges/case studies/experi individually and/or in teams			1 h.	15 h.	16 h.	
Personal study and flexible development of concepts and foster more meaningful learning	d subjects (using active dynamics, to	3 h.		3 h.	
Presentation by the teacher in the classroom, in participa procedures associated with the subjects	atory classe	es, of concepts and	28 h.	36 h.	64 h.	
Practical work in workshops and/or laboratories, individu	ally and/or	in teams	2 h.	15 h.	17 h.	
EVALUATION SYSTEM	w	MAKE-UP MECHANIS	SMS			
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	20%	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	60%					
CH - Class hours: 34 h. NCH - Non-class hours: 66 h. TH - Total hours: 100 h.						

LEARNING ACTIVITIES			СН	NCH	тн
Carrying out/resolving projects/challenges/cases, etc. to interdisciplinary contexts, real and/or simulated, individu			2 h.	1 h.	3 h.
EVALUATION SYSTEM	W	MAKE-UP MECHAN	ISMS		
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	100%		(No mech	anisms)	

1RGO293 (1 sem)					
LEARNING ACTIVITIES			СН	NCH	ТН
Development and writing of records, reports, presentations projects/work experience/challenges/case studies/experime individually and/or in teams			2 h.	1 h.	3 h.
EVALUATION SYSTEM	W	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	100%		(No mech	anisms)	
CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.					





1RGO294 (1 sem) **NCH** СН ΤН LEARNING ACTIVITIES 2 h. 3 h. Development and writing of records, reports, presentations, audiovisual material, etc. on 1 h. projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams **EVALUATION SYSTEM** w MAKE-UP MECHANISMS Presentation and defence of exercises, case studies, 100% (No mechanisms) computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.

CONTENTS

Knowledge of materials:1.Metallic materials2. Ceramic materials3.Polymeric materials4.Composite materials Behavior of materials1.Mechanical characterization2.Behavior in serviceMechanics of materials1.Tension and d deformation2.Tension and compression3.Shear4.Torsion5.Bending

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
[!] Plataforma Moodle	http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_ln
[!] Artículos de carácter técnico	k.pl?grupo=ORGINDUSTRIAL21&ejecuta=60

[!] Laboratorios

[!] Presentaciones en clase

[!] Consultas en páginas web relacionadas con el tema

[!] Transparencias de la asignatura

[!] Proyección de videos