

				PHYSICS I					
		G	ENERAL IN	FORMATION					
Studies	DEGREE IN INC	OUSTRIAL ORGAN			PHYSICS				
	ENGINEERING	-							
Semester		Course	1	Mention / Field of specialisation					
	BASIC TRAININ 2022		Face-to-face	Language					
Credits		Hours/week			91 class hours +	- 59 noi	n-clas	s hours	= 150 to
0.000	Ū		0.00		hours		eide	e neure	
			2030 AGEN	DA GOALS					
NT WORK AND OMIC GROWTH 9 INDUSTRY, INNOVATION									
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////	Subj	ects s subjects required)		///	Knowle		roquir	ed)	
(100			LEARNING	•		neuge I	equil	<i>cu)</i>	
EARNING RESU			LEAKINING	RESULIS		кс	SK	AB	ECTS
-RA03 - To unde	rstand and maste		s of the general	laws of mechanics, ar			<u>x</u>		5,4
oplication to solv	e engineering pro	oblems	-				x		0,36
				y and of gradual compl and analyzing and asse			^		0,30
				y basic, advanced and					
ant-garde, dem	onstrating the abi			ns and/or undertake fu					
vant-garde, dem ith a high degree -RTR2 - To expre	onstrating the abi e of autonomy ess information, id	ility to work in multion	disciplinary team nents that suppo	is and/or undertake fur rt them in an orderly, c	rther studies clear and		x		0,24
vant-garde, dem ith a high degree <b>RTR2</b> - To expre oherent manner,	onstrating the abi e of autonomy ess information, ic orally and in writ	ility to work in multion deas and the argum ing, based on qualit	disciplinary team nents that suppo by information, so	is and/or undertake fu	rther studies clear and		x		0,24
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4 h. 4 h. Self-assessment tests in a context of autonomous and continuous learning w **EVALUATION SYSTEM** MAKE-UP MECHANISMS 20% Reports on the completion of exercises, case studies, Individual written and/or oral tests or individual computer exercises, simulation exercises, laboratory coding/programming tests exercises, term projects, challenges and problems Individual written and/or oral tests or individual 80% coding/programming tests CH - Class hours: 27 h. NCH - Non-class hours: 18 h. TH - Total hours: 45 h.

**RGO106** [!] Identifica, calcula y analiza el movimiento de partículas y sólidos, así como los sistemas de fuerza necesarios para producirlos

LEARNING ACTIVITIES	LEARNING ACTIVITIES				TH
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams				6 h.	16 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints					4 h.
Presentation by the teacher in the classroom, in participat procedures associated with the subjects	tory classe	es, of concepts and	30 h.		30 h.
Carrying out exercises and solving problems individually and/or in teams				22 h.	32 h.
Self-assessment tests in a context of autonomous and continuous learning				8 h.	8 h.
EVALUATION SYSTEM W MAKE-UP MECHANIS					
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory	20%	Individual written and/or oral tests or individual coding/programming tests			
exercises, term projects, challenges and problems					
	80%				

1RG0190 (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			
Observation (technical capacity, attitude and participation)	100%		(No mech	anisms)		
CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.						

1RGO194 (1 sem)



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



LEARNING ACTIVITIES   OH   NCH     Development and writing of records, reports, presentations, audiovisual material, etc. on 2 h.   1 h.   1 h.     Development and writing of records, reports, presentations, audiovisual material, etc. on 2 h.   1 h.   1 h.     Presentation and defence of exercises, case studies, 100%, laboratory practical work, itemation practical work, itemation protectal work, itemation protectal work, itemation protectal work, itemation protectal work, item projects, end of degree project, master's thesis, challenges and problems   MAKE-UP MECHANISMS     CH - Class hours: 2 h.   NCH - Non-class hours: 1 h.   TH - Total hours: 3 h.     ITH - Total hours: 3 h.   MAKE-UP MECHANISMS   I h.     Development and writing of records, reports, presentations, audiovisual material, etc. on 2 h.   1 h.   1 h.     projectswork experience/challenges/case studies, case studies, computer exclose, singulation exercises, laboratory exercises, simulation exercises, executed, laboratory exercises, simulation exercises, executed, laboratory exercises, simulation exercises, simulation exercises, laborator	<b>TH</b> 3 h.
Project/work expension/challenges/case studies/experimental investigations carried out individually and/or in teams   MAKE-UP MECHANISMS     EVALUATION SYSTEM   #   100%   (No mechanisms)     CH - Class hours: 2 h. NCH - Non-class hours: 1 h. H - Total hours: 3 h.   MAKE-UP MECHANISMS   (No mechanisms)     EXRIGIDES (1 sem)   EXRIGIDES (1 sem)   2 h.   1 h.     EVALUATION SYSTEM   #   MCH     EVALUATION SYSTEM   #   MCH     EXROPTION Control (1 sem)   2 h.   1 h.     EXROPTION Control (1 sem)   #   MCH     EVALUATION SYSTEM   #   MCH     EVALUATION SYSTEM   #   MCH     EVALUATION SYSTEM   #   MCH     EVALUATION SYSTEM   #   MAKE-UP MECHANISMS     Reports on the completion of exercises, case studies/ experimental investigations carried out individually and/or in teams   100%     CH - Class hours: 2 h. NCH - Non-class hours: 1 h.   100%   MAKE-UP MECHANISMS     EVALUATION SYSTEM   #   MCH   Non-chanisms)     IRECOTES (1 sem)   100%   MAKE-UP MECHANISMS     EVALUATION SYSTEM   #   MCH   Non-chanisms)     Ch - Class hours: 1	۱h
Presentation and defence of exercises, case studies, computer practical work, simulation practical work, simulation practical work, ismulation practical work, ismulation practical work, simulation problems   100%   (No mechanisms)     CH - Class hours: 2 h.   NCH - Non-class hours: 3 h.   NCH - Non-class hours: 3 h.     IREGOIDS (1 sem)   EARNING ACTIVITIES   CH NCH     Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experimence/challenges/case studies/experimental investigations carried out individually and/or in teams   MAKE-UP MECHANISMS     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS     Reports on the completion of exercises, laboratory exercises, simulation exercises, laboratory exercises, simulation exercises, laboratory exercises, simulation exercises, laboratory exercises, that hours: 3 h.   100%   (No mechanisms)     IEGOIDS (1 sem)   EARNING ACTIVITIES   CH NCH   NCH     IEGOIDS (1 sem)   2 h.   1 h.   1 h.     IREGOIDS (1 sem)   2 h.   1 h.   1 h.     IEGOIDS (1 sem)   MAKE-UP MECHANISMS   2 h.   1 h.     IEGOIDS (1 sem)   100%   (No mechanisms)   1 h	,
computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems   project, master's thesis, challenges and problems     CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.   CH - Class hours: 2 h. NCH     IRCOTES (1 sem)   CH NCH     LEARNING ACTIVITIES   CH NCH     EVALUATION SYSTEM   W     Reports on the completion of exercises, case studies, laboratory exercises, therm projects, challenges and problems   100%     CH - Class hours: 2 h. NCH   10%     CH - Class hours: 3 h.   10%     EVALUATION SYSTEM   W     Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, therm projects, challenges and problems   10%     CH - Class hours: 2 h. NCH - Non-class hours: 3 h.   10%   (No mechanisms)     ELERNING ACTIVITIES   CH NCH   NCH     Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams   2h. 1h.     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS     Reports on the completion of exercises, case studies, individually and/or in teams   2h. 1h.     EVALUATION SYSTEM   M   MAKE-UP MECHANISMS	
NCH - Non-class hours: 1 h. TH - Total hours: 3 h.     ITEGO193 (1 sem)     LEARNING ACTIVITIES   CH   NCH     Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams   2 h.   1 h.     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS     Reports on the completion of exercises, case studies, normalition exercises, tabrory exercises, term projects, challenges and problems   100%   (No mechanisms)     CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.   It.   NCH   NCH     ELEARNING ACTIVITIES   CH   NCH     Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams   2 h.   1 h.     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS   1 h.     TH - Total hours: 3 h.   1 h.   1 h.   1 h.     Iterative contexts, real and/or simulated, individually and/or in teams   2 h.   1 h.     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS   1 h.     Proports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory   100%   (No mechanisms) <td></td>	
LEARNING ACTIVITIES   CH   NCH     Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams   2 h.   1 h.     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS   (No mechanisms)     computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems   MAKE-UP MECHANISMS   (No mechanisms)     CH - Class hours: 2 h.   NCH - Non-class hours: 1 h.   (No mechanisms)   V     NCH - Non-class hours: 3 h.   Exercises, item projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams   2 h.   1 h.     EVALUATION SYSTEM   V   MAKE-UP MECHANISMS   1 h.     TH - Total hours: 3 h.   -   -   1 h.     Terrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams   2 h.   1 h.     EVALUATION SYSTEM   V   MAKE-UP MECHANISMS   1 h.     EVALUATION SYSTEM   V   MAKE-UP MECHANISMS   (No mechanisms)	
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams   2 h.   1 h.     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS     Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems   100%   (No mechanisms)     CH - Class hours: 2 h.   NCH - Non-class hours: 1 h.   TH - Total hours: 3 h.   EEXENDING ACTIVITIES   CH   NCH     Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams   2 h.   1 h.     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS   (No mechanisms)     Ch - Class hours: 2 h.   NCH - Non-class hours: 1 h.   1 h.     TH - Total hours: 3 h.   1 h.   1 h.     ELEARNING ACTIVITIES   CH   NCH     Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams   2 h.   1 h.     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS   (No mechanisms)     Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory <td></td>	
projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS     Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems   100%   (No mechanisms)     CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.   Non-class hours: 1 h. TH - Total hours: 3 h.   Image: CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.     ELEARNING ACTIVITIES   CH - Non-class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.   MCH - Non-class hours: 1 h. TH - Total hours: 3 h.     ELEARNING ACTIVITIES   CH - NCH   NCH - NCH     Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in 1 h. interdisciplinary contexts, real and/or simulated, individually and/or in teams   2 h. 1 h. 1 h. Interdisciplinary contexts, real and/or simulated, individually and/or in teams     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS     Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory   100%	тн
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, simulation exercises, laboratory exercises, term projects, challenges and problems   100%   (No mechanisms)     CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.   NCH - Non-class hours: 1 h. TH - Total hours: 3 h.   Image: CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.     IRG0192 (1 sem)   Image: CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.   Image: CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.     IRG0192 (1 sem)   Image: CH - NCH	3 h.
CH - Class hours: 2 h.   NCH - Non-class hours: 1 h.     NCH - Non-class hours: 3 h.     IRG0192 (1 sem)     LEARNING ACTIVITIES   CH NCH NCH     Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams     EVALUATION SYSTEM   W     Reports on the completion of exercises, laboratory	
LEARNING ACTIVITIES   CH   NCH     Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams   2 h.   1 h.     EVALUATION SYSTEM   W   MAKE-UP MECHANISMS     Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory   100%   (No mechanisms)	
interdisciplinary contexts, real and/or simulated, individually and/or in teams       EVALUATION SYSTEM     W       Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory     100%	ТН
EVALUATION SYSTEM   W     Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory   100%     (No mechanisms)	3 h.
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory   100%   (No mechanisms)	
computer exercises, simulation exercises, laboratory	
CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.	
1RG0191 (1 sem)	
LEARNING ACTIVITIES CH NCH	тн
	3 h.
EVALUATION SYSTEM W MAKE-UP MECHANISMS	
Self-assessment 33% (No mechanisms)	





Co-assessment 34% Observation (technical capacity, attitude and participation)

33%

CH - Class hours: 2 h. NCH - Non-class hours: 1 h. TH - Total hours: 3 h.

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## LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

[!] Plataforma Moodle

[!] Presentaciones en clase

[!] Apuntes de la asignatura

[!] Transparencias de la asignatura

Bibliography https://katalogoa.mondragon.edu/janium-bin/sumario.pl?Id=2023091 8125147