

Goi Eskola Politeknikoa Escuela Politécnica Superior

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	-	ECHATRONICS ENGINE	RING	Subject	?				
Semester		Course 1		Mention / Field of specialisation					
	BASIC TRAININ	Modality Face	to face	•	CASTELLANO/		D۸		
Credits		Hours/week 5	-10-1406		90 class hours +			s hours –	150 to
Greans	0	Hours/week 5			hours		11-01833	5 110013 -	150 10
			PROFE	SSORS					
OTEGI MA	RTINEZ, NAGOF	RE							
ARDANZA	CUEVAS, ASIEF	२							
		REQUIRED	PREVIO	OUS KNOWLEDO	θE				
		jects			Knowl	-			
(No	o specific previou	is subjects required)		•	lo previous knov	vledge r	require	ed)	
		LE	ARNING	RESULTS					
ARNING RESU		ary projects specific to the	ir specialty	and of gradual comp	levity -	КС	SK x	AB	ECTS 3,92
coming aware of	of respect for hur	man rights and fundament	al rights, a	nd analyzing and asse	essing the				5,02
		on the SDGs - to acquire a bility to work in multidiscipl							
th a high degree			inary learn	s and/or undertake fu	Timer studies				
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RGJ191 [!] Contribuir en la estrategia de funcionamiento del equipo priorizando los objetivos comunes, fomentando y valorando la participación de todas las personas y responsabilizándose de las tareas individuales, así como del cumplimiento de

plazos.

LEARNING ACTIVITIES	4 h.	NCH	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				3 h.	7 h.
Carrying out/resolving projects/challenges/cases, etc. to pr interdisciplinary contexts, real and/or simulated, individually	2 h.		2 h.		
Presentation by the teacher in the classroom, in participato procedures associated with the subjects	3 h.		3 h.		
Carrying out exercises and solving problems individually and/or in teams			10 h.	10 h.	20 h.
EVALUATION SYSTEM	SMS				
omputer exercises, simulation exercises, laboratory practical work, simula					
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	30%	Presentation and defe practical work, simulat term projects, end of c	tion practical	work, laborato	ory practical wo
computer exercises, simulation exercises, laboratory	30%	practical work, simulat	tion practical degree projec	work, laborato ct, master's the	ory practical wor esis, challenges

RGJ192 [!] Conoce y describe las fases para desarrollar los equipos de su ingeniería, e identifica y describe las funciones profesionales de un ingeniero, tomando conciencia de la contribución al logro de los objetivos de desarrollo sostenible (ODS)

		16 h.
	6 h.	6 h.
	ISMS	
hanisms)	(No mecha	

RGJ193 [!] Redacta una memoria de proyecto clara y concisa utilizando las fuentes de información y estructura de memoria facilitadas, 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	3 h.	2 h.	5 h.		
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints				9 h.	17 h.
Carrying out exercises and solving problems individually	4 h.		4 h.		
EVALUATION SYSTEM W MAKE-UP MECHANISMS					
Reports on the completion of exercises, case studies, 40% Reports on the completion of exercises, case studies, c			idies, computer		



NCH - Non-class hours: 11 h. TH - Total hours: 26 h.

computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems		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	20%	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
Observation (technical capacity, attitude and participation)	40%	Comments: Revision and correction of the written report of the semester
CH - Class hours: 15 h.		

RGJ194 [!] Realiza una presentación oral y defensa del proyecto clara y concisa, haciendo un uso correcto del lenguaje

LEARNING ACTIVITIES	СН	NCH	ТН		
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			4 h.	2 h.	6 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints			4 h.	4 h.	8 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects			3 h.		3 h.
Carrying out exercises and solving problems individually and/or in teams			5 h.	4 h.	9 h.
EVALUATION SYSTEM W MAKE-UP MECHANIS			IS		
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems 50% Presentation and defe practical work, simulat term projects, end of contents			n practical	work, laborate	ory practical work
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			ject of the secon		
Observation (technical capacity, attitude and participation)	20%				
CH - Class hours: 16 h. NCH - Non-class hours: 10 h. IH - Total hours: 26 h.					

CONTENTS

- 1. Welcome plan
- 2. Teamwork
- 3. Oral communication
- 4. Written communication
- 5. Professional profile

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
Topic related web quires	Johansen, Lars G., "Project Planning and Management", chapter 3
Presentations by external Lecturers Technical articles	from: Project-Organised and Problem-Based Learning, Preliminary version
Moodle Platform Class presentations Subject notes	Kolmos, A., Du, X., Holgaard, J. E. and Jensen, L. P.: Facilitation in a PBL Environment, Aalborg University, 2008. (Irakurtzeko 23-34) Bustos, C.; Moreno. A.; 2011 Los equipos: cómo trabajar juntos, sin tirarnos los trastos. ISBN 978-84-614-3951-5



Video projections

Arana, N.; Astigarraga, E.; Carrera, X.; Rodríguez, V.; Zubizarreta, M. 2007. Marco conceptual y pedagógico para la implementación de la Formación por Proyectos en el Sena. Didáctica Proyectos Educativos. Bogotá. (irakurtzeko 172-181) http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_ln k.pl?grupo=MECATRONICA11&ejecuta=25&_ST