

## [GOT301] METHODOLOGICAL FOUNDATIONS

### GENERAL INFORMATION

<b>Studies</b>	DEGREE IN INDUSTRIAL ORGANIZATION ENGINEERING		<b>Subject</b>	ORGANISATION PROJECTS
<b>Semester</b>	1	<b>Course</b>	1	<b>Mention / Field of specialisation</b>
<b>Character</b>	COMPULSORY		<b>Language</b>	EUSKARA
<b>Plan</b>	2022	<b>Modality</b>	Face-to-face	<b>Total hours</b> 86 class hours + 64 non-class hours = <b>150 total hours</b>
<b>Credits</b>	6	<b>Hours/week</b>	4.78	

### PROFESSORS

SANCHEZ ZEZIAGA, ANE  
ARRIOLA ORMAETXEA, LEIRE

### REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
(No specific previous subjects required)	(No previous knowledge required)

### LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
<b>G-RTR1</b> - To develop interdisciplinary projects specific to their specialty and of gradual complexity, - becoming aware of respect for human rights and fundamental rights, and analyzing and assessing the impact of the proposed solutions on the SDGs - to acquire and/or apply basic, advanced and /or avant-garde, demonstrating the ability to work in multidisciplinary teams and/or undertake further studies with a high degree of autonomy		x		3,92
<b>G-RTR2</b> - To express information, ideas and the arguments that support them in an orderly, clear and coherent manner, orally and in writing, based on quality information, self-made or obtained from different sources, using inclusive and non-discriminatory language		x		2,08
<b>Total:</b>				<b>6</b>

KC: Knowledge or Content / SK: Skills / AB: Abilities

### ENAEE LEARNING RESULTS

ENAEE LEARNING RESULTS	ECTS	
<b>ENAE01</b> - Knowledge and understanding: Knowledge and understanding of the underlying scientific and mathematical principles in their branch of engineering.	2,19	
<b>ENAE04</b> - Knowledge and understanding: To be aware of the multidisciplinary context of engineering.	0,48	
<b>ENAE05</b> - Analysis in engineering: Ability to apply their knowledge and understanding in identifying, formulating and solving engineering problems using established methods.	1,2	
<b>ENAE08</b> - Engineering projects: Ability to apply their knowledge in the development and completion of projects which meet specific requirements.	0,62	
<b>ENAE13</b> - Practical application of engineering: Ability to select and use suitable equipment, tools and methods.	0,28	
<b>ENAE17</b> - Transversal competences: To work effectively, both individually and in a team.	0,62	
<b>ENAE18</b> - Transversal competences: To use different methods to communicate effectively with the engineering community and society in general.	0,62	
<b>Total:</b>		<b>6</b>

### SECONDARY LEARNING RESULTS

**RG0190** [!] *Conocer y aplicar las fases para desarrollar de forma guiada, con los objetivos y la planificación previamente definidos, un proyecto de complejidad técnica acorde con los conocimientos de formación básica de la ingeniería. Reflexiona sobre los cono*

#### LEARNING ACTIVITIES

	CH	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	10 h.	15 h.	25 h.
Carrying out exercises and solving problems individually and/or in teams	14 h.	5 h.	19 h.

#### EVALUATION SYSTEM

	W
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, 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	80%

#### MAKE-UP MECHANISMS

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

project, master's thesis, challenges and problems

and problems

**CH - Class hours:** 24 h.  
**NCH - Non-class hours:** 20 h.  
**TH - Total hours:** 44 h.

**RG0191** [!] *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**

	<b>CH</b>	<b>NCH</b>	<b>TH</b>
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	12 h.	8 h.	20 h.
Carrying out exercises and solving problems individually and/or in teams	8 h.	4 h.	12 h.

**EVALUATION SYSTEM**

	<b>W</b>
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	70%
Observation (technical capacity, attitude and participation)	30%

**MAKE-UP MECHANISMS**

Observation (technical capacity, attitude and participation)

**CH - Class hours:** 20 h.  
**NCH - Non-class hours:** 12 h.  
**TH - Total hours:** 32 h.

**RG0192** [!] *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)*

**LEARNING ACTIVITIES**

	<b>CH</b>	<b>NCH</b>	<b>TH</b>
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams	6 h.	5 h.	11 h.
Carrying out exercises and solving problems individually and/or in teams	6 h.	5 h.	11 h.

**EVALUATION SYSTEM**

	<b>W</b>
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	100%

**MAKE-UP MECHANISMS**

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

**CH - Class hours:** 12 h.  
**NCH - Non-class hours:** 10 h.  
**TH - Total hours:** 22 h.

**RG0193** [!] *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**

	<b>CH</b>	<b>NCH</b>	<b>TH</b>
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	10 h.	11 h.	21 h.
Practical work in workshops and/or laboratories, individually and/or in teams	5 h.		5 h.

**EVALUATION SYSTEM**

	<b>W</b>
Reports on the completion of exercises, case studies,	90%

**MAKE-UP MECHANISMS**

Reports on the completion of exercises, case studies, computer

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	10%	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
<b>CH - Class hours:</b> 15 h. <b>NCH - Non-class hours:</b> 11 h. <b>TH - Total hours:</b> 26 h.		

<b>RG0194</b> [!] <i>Realiza una presentación oral y defensa del proyecto clara y concisa, haciendo uso correcto, inclusivo y no discriminatorio del lenguaje.</i>			
<b>LEARNING ACTIVITIES</b>	<b>CH</b>	<b>NCH</b>	<b>TH</b>
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	15 h.	11 h.	26 h.
<b>EVALUATION SYSTEM</b>	<b>W</b>	<b>MAKE-UP MECHANISMS</b>	
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	100%	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	
<b>CH - Class hours:</b> 15 h. <b>NCH - Non-class hours:</b> 11 h. <b>TH - Total hours:</b> 26 h.			

## CONTENTS

1. Get to know each other- Let your classmates know the work- Group Cohesion- Team Coordination (time management) / (planning)  
 2. Written documentation- The structure of a reportIntroductionContent classification in sectionsConsequencesAttachments- The appearance of a reportCreate a document template on your computerIndexes and automatic paginationCitation of the bibliography  
 3. Presentations (oral presentation)- Structure of the presentation- Non-verbal communication- Verbal communication- Voice- Level of persuasion  
 4. Learn to learn- Pass the CHAEA questionnaire- Different learning styles  
 5. PBL methodology- Description of the problem and justification of the problem- Analysis of the problem- Limitation of the problem- Proposal of solutions- Selection of the solution- Implementation of the solution- Implementation of the reportComplete the PBL  
 6. Organizational engineering profile

## LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
Subject notes	Simon Hergueta (1996): Aprender a hablar en público. Ed. La Palma
Technical articles	Etxebarria Bilbao, JR (2014): Komunikazioa Euskaraz ingenieritza. UEU, Bilbo
Topic related web quires	CHAEA cuestionario. universidad de Deusto Bustos, C & Moreno, A : Los equipos. Como trabajar juntos sin tirarnos trastos
Moodle Platform	
Class presentations	
Video projections	