

[GIK301] METHODOLOGICAL FUNDAMENTALS

GENERAL INFORMATION

Studies	DEGREE IN COMPUTER ENGINEERING		Subject	GENERAL PRINCIPLES
Semester	1	Course	1	Mention / Field of specialisation
Character	COMPULSORY		Language	EUSKARA
Plan	2022	Modality	Face-to-face	Total hours
Credits	6	Hours/week	5.44	98 class hours + 52 non-class hours = 150 total hours

PROFESSORS

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REQUIRED PREVIOUS KNOWLEDGE

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

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
G-RTR1 - 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
G-RTR2 - 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
Total:				6

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

SECONDARY LEARNING RESULTS

RG190 [!] *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	4 h.	1,4 h.	5,4 h.
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams	21 h.	13,6 h.	34,6 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	3 h.	1 h.	4 h.

EVALUATION SYSTEM

	W
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	4%
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%
Prototype / Product	86%

Comments: Minimum grade: 5 Project evaluation based on technical rubric

MAKE-UP MECHANISMS

(No mechanisms)
Comments: Continuous assessment. It may be asked to redo the product/document.

CH - Class hours: 28 h.
NCH - Non-class hours: 16 h.
TH - Total hours: 44 h.

RG1191 [!] *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

	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	4 h.	1,4 h.	5,4 h.
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams	14 h.	8,6 h.	22,6 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	3 h.	1 h.	4 h.

EVALUATION SYSTEM

W

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	4%
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%
Prototype / Product	86%

Comments: Minimum grade: 5 Project evaluation based on technical rubric

MAKE-UP MECHANISMS

(No mechanisms)

Comments: Continuous assessment. It may be asked to redo the product/document.

CH - Class hours: 21 h.

NCH - Non-class hours: 11 h.

TH - Total hours: 32 h.

RG1192 [!] *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

	CH	NCH	TH
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams	12 h.	8 h.	20 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	2 h.		2 h.

EVALUATION SYSTEM

W

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	4%
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%
Prototype / Product	86%

Comments: Minimum grade: 5 Project evaluation based on technical rubric

MAKE-UP MECHANISMS

(No mechanisms)

Comments: Continuous assessment. It may be asked to redo the product/document.

CH - Class hours: 14 h.

NCH - Non-class hours: 8 h.

TH - Total hours: 22 h.

RG1193 [!] *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

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	1 h.	,6 h.	1,6 h.
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams	13 h.	7,4 h.	20,4 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	3 h.	1 h.	4 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	84%	<i>(No mechanisms)</i>	
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%	Comments: Continuous assessment. It may be asked to redo the document.	
Prototype / Product	6%		
Comments: Minimum grade: 5 Project evaluation based on technical rubric			
CH - Class hours: 17 h.			
NCH - Non-class hours: 9 h.			
TH - Total hours: 26 h.			

RG194 [!] *Realiza una presentación oral y defensa del proyecto clara y concisa, haciendo uso correcto, inclusivo y no discriminatorio del lenguaje*

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	3 h.	,6 h.	3,6 h.
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams	12 h.	6,4 h.	18,4 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	3 h.	1 h.	4 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	4%	<i>(No mechanisms)</i>	
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	90%	Comments: Continuous assessment. It may be asked to redo the presentation.	
Prototype / Product	6%		
Comments: Minimum grade: 5 Project evaluation based on technical rubric			
CH - Class hours: 18 h.			
NCH - Non-class hours: 8 h.			
TH - Total hours: 26 h.			

CONTENTS

1. Teamwork 1.1 Dynamics to reinforce trust 1.2 Planning 1.3 Roles
 2. Learning to learn
 3. Project Based learning 3.1 Phases of a project 3.2 Project development 3.3 Communicating results
 4. Written communication
 5. Oral communication

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

Bibliography

Subject notes

<https://labur.eus/biblio-GIK301>

Moodle Platform

Computer practical training