

## [GIH305] INFORMATION SYSTEMS

### GENERAL INFORMATION

<b>Studies</b>	DEGREE IN COMPUTER ENGINEERING	<b>Subject</b>	?
<b>Semester</b>	2	<b>Course</b>	3
<b>Character</b>	COMPULSORY	<b>Mention / Field of specialisation</b>	
<b>Plan</b>	2022	<b>Modality</b>	Face-to-face
<b>Credits</b>	4,5	<b>Hours/week</b>	4.08
		<b>Language</b>	CASTELLANO/EUSKARA
		<b>Total hours</b>	73.5 class hours + 39 non-class hours = <b>112.5 total hours</b>

### PROFESSORS

MARKIEGI GONZALEZ, URTZI

### REQUIRED PREVIOUS KNOWLEDGE

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

### LEARNING RESULTS

	KC	SK	AB	ECTS
<b>GIR309</b> - To integrate ICT Solutions and business processes by actively participating in the specification, design, implementation and maintenance of information and communication systems taking into account the regulations and regulation of computing at national, European and international levels		x		3,78
<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		0,4
<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		0,32

**Total:** 4,5

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

### SECONDARY LEARNING RESULTS

**RG1390** [!] *Definir y gestionar los objetivos y la planificación de un proyecto que le permita adquirir y/o reforzar los conocimientos de tecnologías específicas de su especialidad,- que en ocasiones llegan a la vanguardia del conocimiento- y definir una estrate*

#### LEARNING ACTIVITIES

Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams

CH

3 h.

NCH

1 h.

TH

4 h.

#### EVALUATION SYSTEM

W

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

50%

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

Prototype / Product

30%

**Comments:** Continuous assessment.

#### MAKE-UP MECHANISMS

(No mechanisms)

**CH** - Class hours: 3 h.

**NCH** - Non-class hours: 1 h.

**TH** - Total hours: 4 h.

**RG1391** [!] *Coordinar el equipo de trabajo, estimulando la cohesión y buen clima para lograr la integración de todas las personas y su contribución para alcanzar un rendimiento apropiado, tanto a nivel individual como grupal, para el desarrollo del proyecto en*

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		2 h.	1 h.	3 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	20%	(No mechanisms)		
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	50%			
Prototype / Product	30%			
<b>Comments:</b> Continuous assessment.				
<b>CH - Class hours:</b> 2 h.				
<b>NCH - Non-class hours:</b> 1 h.				
<b>TH - Total hours:</b> 3 h.				

**RG1392** [!] *Identificar y argumentar de forma precisa los ODS en los que incide el proyecto realizado, aportando posibles acciones para la mejora.*

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		2 h.	1 h.	3 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	20%	(No mechanisms)		
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	50%			
Prototype / Product	30%			
<b>Comments:</b> Continuous assessment.				
<b>CH - Class hours:</b> 2 h.				
<b>NCH - Non-class hours:</b> 1 h.				
<b>TH - Total hours:</b> 3 h.				

**RG1393** [!] *Elabora la memoria del proyecto, aportando argumentos elaborados 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		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	20%	(No mechanisms)		
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	50%			
Prototype / Product	30%			
<b>Comments:</b> Continuous assessment. It may be asked to redo the document.				

**CH - Class hours:** 3 h.
  
**NCH - Non-class hours:** 1 h.
  
**TH - Total hours:** 4 h.

**RG1394** [!] *Realiza una presentación oral del proyecto, justificando las soluciones propuestas con argumentos elaborados y precisos, 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		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	20%	(No mechanisms)		
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	50%			
Prototype / Product	30%			
<b>Comments:</b> Continuous assessment.				

**CH - Class hours:** 3 h.
  
**NCH - Non-class hours:** 1 h.
  
**TH - Total hours:** 4 h.

**RG1317** [!] *Aplica las buenas prácticas en gestión de servicios de Tecnologías de la Información (TI).*

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.	1,2 h.	4,2 h.
Personal study and flexible development of concepts and subjects using active dynamics, to foster more meaningful learning		18 h.	12 h.	30 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints		2 h.		2 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		8,5 h.	8,3 h.	16,8 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects		2 h.		2 h.
Carrying out exercises and solving problems individually and/or in teams		3 h.	1 h.	4 h.
Practical work in workshops and/or laboratories, individually and/or in teams		8 h.	4 h.	12 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	12%	Individual written and/or oral tests or individual coding/programming tests		
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	18%	<b>Comments:</b> Students with less than 5 in the Control point must retake the exam. Control point value will be 25% and retake 75%. Practices: Continuous assessment. It may be asked to redo practises, being 5 the maximum grade achievable. Project: There will not be any retake of the individual defense.		
Individual written and/or oral tests or individual coding/programming tests	40%			
Prototype / Product	30%			
<b>Comments:</b> Minimum grade: 5 Project evaluation based on technical rubric				

**CH - Class hours:** 44,5 h.  
**NCH - Non-class hours:** 26,5 h.  
**TH - Total hours:** 71 h.

**RG1318** [!] *Conoce la evolución de los sistemas de información, las Aplicaciones Informáticas de la Empresa (AIE) y es capaz de aplicar un proceso de selección de solución con garantías.*

#### 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.	,1 h.	1,1 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints	2 h.		2 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	3 h.	1,4 h.	4,4 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	4 h.	2 h.	6 h.
Carrying out exercises and solving problems individually and/or in teams	6 h.	4 h.	10 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	42%
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	5%
Individual written and/or oral tests or individual coding/programming tests	50%
Prototype / Product	3%
<b>Comments:</b> Minimum grade: 5 Project evaluation based on technical rubric	

Individual written and/or oral tests or individual coding/programming tests  
**Comments:** Students with less than 5 in the Control point must retake the exam. Control point value will be 25% and retake 75%. Practices: Continuous assessment. It may be asked to redo practises, being 5 the maximum grade achievable. Project: There will not be any retake of the individual defense.

**CH - Class hours:** 16 h.  
**NCH - Non-class hours:** 7,5 h.  
**TH - Total hours:** 23,5 h.

## CONTENTS

1. Business Computer Applications (BCA)
  - 1.1 History of ICT in the enterprise
  - 1.2 Enterprise Architectures
  - 1.3 Porter Model for BCAs
  - 1.4 Governance models (ITIL, COBIT)
2. IT solutions procurement process

## LEARNING RESOURCES AND BIBLIOGRAPHY

#### Learning resources

Subject notes  
Presentations by external Lecturers  
Moodle Platform  
Video projections  
Specific Master Software

#### Bibliography

<https://labur.eus/biblio-GIH305>