

## [GJX201] ADVANCED ELECTRICAL CAD

### GENERAL INFORMATION

<b>Studies</b>	DEGREE IN MECHATRONICS ENGINEERING		<b>Subject</b>	?	
<b>Semester</b>	1	<b>Course</b>	3	<b>Mention / Field of specialisation</b>	???
<b>Character</b>	OPTIONAL		<b>Language</b>	EUSKARA/CASTELLANO	
<b>Plan</b>	2022	<b>Modality</b>	Face-to-face	<b>Total hours</b>	73 class hours + 77 non-class hours = <b>150 total hours</b>
<b>Credits</b>	6	<b>Hours/week</b>	4.06		

### PROFESSORS

ORMAETXEA MUGERTZA, JON
   
 FERNANDEZ DE GOBEO DIAZ DE DURANA, ANDER

### 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		0,34
<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		0,34
<b>G_R436</b> - To know and use the graphic representation techniques of advanced Electrical CAD	x			5,32
<b>Total:</b>				<b>6</b>

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

### SECONDARY LEARNING RESULTS

**RGJ390** [!] *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

	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.	2,25 h.	4,25 h.

#### EVALUATION SYSTEM

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

W

100%

#### MAKE-UP MECHANISMS

(No mechanisms)

**CH - Class hours:** 2 h.
   
**NCH - Non-class hours:** 2,25 h.
   
**TH - Total hours:** 4,25 h.

**RGJ391** [!] *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.	2,25 h.	4,25 h.

#### EVALUATION SYSTEM

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory

W

100%

#### MAKE-UP MECHANISMS

(No mechanisms)

exercises, term projects, challenges and problems

**CH - Class hours:** 2 h.
   
**NCH - Non-class hours:** 2,25 h.
   
**TH - Total hours:** 4,25 h.

**RGJ393** [!] *Elabora la memoria del proyecto, aportando argumentos elaborados y haciendo un uso correcto, inclusivo y no discriminatorio del lenguaje.*

**LEARNING ACTIVITIES**

	<i>CH</i>	<i>NCH</i>	<i>TH</i>
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.	2,25 h.	4,25 h.

**EVALUATION SYSTEM**

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

*W*

100%

**MAKE-UP MECHANISMS**

*(No mechanisms)*

**CH - Class hours:** 2 h.
   
**NCH - Non-class hours:** 2,25 h.
   
**TH - Total hours:** 4,25 h.

**RGJ394** [!] *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**

	<i>CH</i>	<i>NCH</i>	<i>TH</i>
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.	2,25 h.	4,25 h.

**EVALUATION SYSTEM**

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

*W*

100%

**MAKE-UP MECHANISMS**

*(No mechanisms)*

**CH - Class hours:** 2 h.
   
**NCH - Non-class hours:** 2,25 h.
   
**TH - Total hours:** 4,25 h.

**RGJ436** [!] *Conocer y utilizar las técnicas de representación gráfica propias del CAD Eléctrico avanzado*

**LEARNING ACTIVITIES**

	<i>CH</i>	<i>NCH</i>	<i>TH</i>
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.	3 h.	5 h.
Personal study and flexible development of concepts and subjects using active dynamics, to foster more meaningful learning	10 h.	20 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	10 h.	40 h.	50 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	36 h.		36 h.

Reading and personal and/or shared analysis of relevant and current publications (books, articles, catalogues, etc.) related to the speciality

5 h.

5 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

50%

Individual written and/or oral tests or individual coding/programming tests

Individual written and/or oral tests or individual coding/programming tests

50%

**CH - Class hours:** 65 h.

**NCH - Non-class hours:** 68 h.

**TH - Total hours:** 133 h.

**CONTENTS**

*(No contents for this subject)*

**LEARNING RESOURCES AND BIBLIOGRAPHY**

**Learning resources**

Subject notes  
 Moodle Platform  
 Class presentations  
 Programmes

**Bibliography**

Gischel, Bernd. EPLAN Electric P8 Reference Handbook (3rd ed).  
 Carl Hanser Verlag. Munich. 2013. ISBN: 978-1-56990-476-3