[GDF301] PROTOTYPING

GENERAL INFORMATION

Studies	DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING	**Subject**	PROJECT
Semester	2	**Course**	1
Character	COMPULSORY	**Mention / Field of specialisation**	
Plan	2022	**Modality**	Face-to-face
Credits	3	**Hours/week**	2.09
Language	EUSKARA		
Total hours	37.56 class hours + 37.44 non-class hours = **75 total hours**		

2030 AGENDA GOALS

PROFESSORS

ZUBELDIA INDART, ITSASO

ARDANZA CUEVAS, ASIER

REQUIRED PREVIOUS KNOWLEDGE

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

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
GDR102 - Knowledge of basic subjects and technologies, which enables you to learn new methods and specific technologies in Industrial Design Engineering and Product Development, as well as giving you great versatility to adapt to new situations.	x			2,4
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		0,36
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		0,24
			Total:	3

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

ENAEE LEARNING RESULTS	ECTS
ENAE05 - Analysis in engineering: Ability to apply their knowledge and understanding in identifying, formulating and solving engineering problems using established methods.	0,4
ENAE06 - Analysis in engineering: Ability to apply their knowledge and understanding in analysing product, process and method engineering.	0,4
ENAE11 - Research & innovation: Ability to design and carry out experiments, to interpret data and draw conclusions.	0,2
ENAE16 - Practical application of engineering: To be aware of the implications of the practical application of engineering.	0,8
ENAE17 - Transversal competences: To work effectively, both individually and in a team.	0,6
ENAE18 - Transversal competences: To use different methods to communicate effectively with the engineering community and society in general.	0,4
ENAE21 - Transversal competences: To recognise the need for and be able to voluntarily develop continuous learning.	0,2
Total:	3

SECONDARY LEARNING RESULTS

2RGD191 (2 sem)

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		3 h.	3 h.

EVALUATION SYSTEM	W
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	100%

MAKE-UP MECHANISMS

(No mechanisms)

CH - Class hours: 0 h.
NCH - Non-class hours: 3 h.
TH - Total hours: 3 h.

2RGD193 **(2 sem)**

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		3 h.	3 h.

EVALUATION SYSTEM	W	MAKE-UP 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	100%	*(No mechanisms)*

CH - Class hours: 0 h.
NCH - Non-class hours: 3 h.
TH - Total hours: 3 h.

2RGD190 **(2 sem)**

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		3 h.	3 h.

EVALUATION SYSTEM	W	MAKE-UP 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	100%	*(No mechanisms)*

CH - Class hours: 0 h.
NCH - Non-class hours: 3 h.
TH - Total hours: 3 h.

2RGD192 **(2 sem)**

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	100%	*(No mechanisms)*

CH - Class hours: 2 h.
NCH - Non-class hours: 1 h.
TH - Total hours: 3 h.

RGD125 **[!]** ***Conoce e identifica los procesos de prototipado más adecuados para cada fase del proceso de diseño***

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	12,45 h.	8,44 h.	20,89 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints	1,78 h.	4,44 h.	6,22 h.
Practical work in workshops and/or laboratories, individually and/or in teams	21,33 h.	11,56 h.	32,89 h.

EVALUATION SYSTEM	W
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	55%
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%
Individual written and/or oral tests or individual coding/programming tests	25%
Prototype / Product	10%

MAKE-UP MECHANISMS

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

Prototype / Product

CH - Class hours: 35,56 h.
NCH - Non-class hours: 24,44 h.
TH - Total hours: 60 h.

2RGD194 **(2 sem)**

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		3 h.	3 h.

EVALUATION SYSTEM	W
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	100%

MAKE-UP MECHANISMS

(No mechanisms)

CH - Class hours: 0 h.
NCH - Non-class hours: 3 h.
TH - Total hours: 3 h.

CONTENTS

1. Prototyping1.1 What is prototyping?1.2 Types of Prototypes1.3 When and how to prototype2. Basic Prototyping Processes2.1 Basic processes - Rapid P.2.2 Basic processes - volumetric P. aesthetics2.3 Basic Processes - Functional P.

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

[!] *Apuntes de la asignatura*
[!] *Consultas en páginas web relacionadas con el tema*
[!] *Realización de prácticas en laboratorio*
[!] *Proyección de videos*
[!] *Presentaciones en clase*

Bibliography

http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_lnk. pl?grupo=DISINDUSTRIAL11&ejecuta=25&_ST