

[GDJ301] GRAPHIC EXPRESSION III

GENERAL INFORMATION

Studies	DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING		Subject	DRAWING
Semester	2	Course	2	Mention / Field of specialisation
Character	COMPULSORY		Language	EUSKARA/CASTELLANO
Plan	2022	Modality	Face-to-face	Total hours 66 class hours + 84 non-class hours = 150 total hours
Credits	6	Hours/week	3.67	

2030 AGENDA GOALS



PROFESSORS

ZUGASTI TESO, FELIX
BASKARAN RAZKIN, MAIDER

REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
GRAPHIC EXPRESSION I	(No previous knowledge required)
GRAPHIC EXPRESSION II	

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
GDR210 - Capacity for spatial vision and knowledge of graphic representation techniques, both through traditional methods of metric geometry and descriptive geometry, and through computer-aided design applications			x	5,4
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:				6

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

ENAE LEARNING RESULTS

ENAE LEARNING RESULTS	ECTS
ENAE02 - Knowledge and understanding: A systematic understanding of the key aspects and concepts of their branch of engineering.	0,72
ENAE06 - Analysis in engineering: Ability to apply their knowledge and understanding in analysing product, process and method engineering.	0,72
ENAE08 - Engineering projects: Ability to apply their knowledge in the development and completion of projects which meet specific requirements.	1,6
ENAE13 - Practical application of engineering: Ability to select and use suitable equipment, tools and methods.	1,6
ENAE15 - Practical application of engineering: Understanding of applicable methods and techniques and their limitations.	0,96
ENAE19 - Transversal competences: Demonstrate that they are aware of the responsibility implied in the practical application of engineering, the social and environmental impact, and show commitment with professional ethics, responsibility and regulations of the practical application of engineering.	0,4
Total:	6

SECONDARY LEARNING RESULTS

2RGD294 (2 sem)

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.	2 h.	3 h.

EVALUATION SYSTEM

Presentation and defence of exercises, case studies,

W

100%

MAKE-UP MECHANISMS

(No mechanisms)

computer practical work, simulation practical work,
laboratory practical work, term projects, end of degree
project, master's thesis, challenges and problems

CH - Class hours: 1 h.

NCH - Non-class hours: 2 h.

TH - Total hours: 3 h.

RGD217 [!] *Realiza diseños de estructuras soldadas y piezas modeladas en chapa*

LEARNING ACTIVITIES

Computer simulation exercises, individually and/or in teams

CH

5 h.

NCH

10 h.

TH

15 h.

EVALUATION SYSTEM

W

100%

MAKE-UP MECHANISMS

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

(No mechanisms)

CH - Class hours: 5 h.

NCH - Non-class hours: 10 h.

TH - Total hours: 15 h.

2RGD290 (2 sem)

LEARNING ACTIVITIES

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

CH

1 h.

NCH

2 h.

TH

3 h.

EVALUATION SYSTEM

W

100%

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

(No mechanisms)

CH - Class hours: 1 h.

NCH - Non-class hours: 2 h.

TH - Total hours: 3 h.

2RGD291 (2 sem)

LEARNING ACTIVITIES

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

CH

1 h.

NCH

2 h.

TH

3 h.

EVALUATION SYSTEM

W

100%

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

(No mechanisms)

CH - Class hours: 1 h.

NCH - Non-class hours: 2 h.

TH - Total hours: 3 h.

RGD216 [!] *Representa y acota piezas con superficies complejas respetando las normas de dibujo técnico además de diseñar los moldes necesarios acorde a su posterior fabricación*

LEARNING ACTIVITIES

Personal study and flexible development of concepts and subjects using active dynamics, to foster more meaningful learning

CH

47 h.

NCH

55 h.

TH

102 h.

Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints

3 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

40%

(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

20%

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

40%

CH - Class hours: 50 h.

NCH - Non-class hours: 55 h.

TH - Total hours: 105 h.

2RGD293 (2 sem)

LEARNING ACTIVITIES

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

CH

1 h.

NCH

2 h.

TH

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: 1 h.

NCH - Non-class hours: 2 h.

TH - Total hours: 3 h.

RGD218 [!] *Describe los parámetros y realiza parametrizaciones de conjuntos y piezas correctamente.*

LEARNING ACTIVITIES

Personal study and flexible development of concepts and subjects using active dynamics, to foster more meaningful learning

CH

5 h.

NCH

10 h.

TH

15 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: 5 h.
NCH - Non-class hours: 10 h.
TH - Total hours: 15 h.

2RGD292 (2 sem)

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

2 h.

NCH

1 h.

TH

3 h.

EVALUATION SYSTEM

W

100%

MAKE-UP MECHANISMS

(No mechanisms)

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

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

CONTENTS

- SolidWorks Surfaces- SolidWorks Welding- SolidWorks Parameterization- SolidWorks Molds

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

[!] *Presentaciones en clase*

[!] *Proyección de videos*

[!] *Realización de prácticas en ordenador*

Bibliography

<https://katalogoa.mondragon.edu/janium-bin/sumario.pl?Id=20240103143045>