

Course guide

340024 - EXGR - Graphic Expression

Last modified: 19/05/2026

Unit in charge: Vilanova i la Geltrú School of Engineering
Teaching unit: 717 - DEGD - Department of Engineering Graphics and Design.

Degree: BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Compulsory subject).
BACHELOR'S DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING (Syllabus 2009). (Compulsory subject).
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Compulsory subject).
BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Compulsory subject).
BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING AND RAILWAY SYSTEMS (Syllabus 2024). (Compulsory subject).

Academic year: 2026 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: FREDERIC VILÀ MARTÍ

Others: Primer quadrimestre:
ALBERTO LACASA PUIGMAL - D2011, D2012, N2011, N2012
BEHNAM MOBARAKI - D2011, D2012, D2021, D2022, D2111, D2112, D2121, N2011, N2012, N2021, N2111, N2112, N2121
FRANCESC MOTJER I CERVERO - D2111, D2112, D2121, N2111, N2112, N2121
EDWIN BLASNILO RUA RAMIREZ - D2021, N2021

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

1. CE19. Knowledge and ability to apply graphic engineering technique.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

Introduce concepts, techniques and methods of the area of Graphic Engineering in Industrial Engineering and Product Design.
Familiarize with technical and graphical language and use them in industrial environment.
Facilitate and enhance the capacity of abstraction and communication.
Develop and exercise space imagination.

STUDY LOAD

Type	Hours	Percentage
Hours large group	30,0	20.00
Hours small group	30,0	20.00
Self study	90,0	60.00

Total learning time: 150 h



CONTENTS

1. Plane Geometry

Description:

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Full-or-part-time: 4h

Theory classes: 4h

2. Space Geometry

Description:

Technical standards of representation: views, cuts, threads, dimensions, introduction to the representation of systems and industrial assemblies

Specific objectives:

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Full-or-part-time: 26h

Theory classes: 26h

(ENG) 5.- Pràctiques de laboratori

Description:

Guided practices throughout the course. Exercises to apply knowledge

Full-or-part-time: 30h

Laboratory classes: 30h

GRADING SYSTEM

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EXAMINATION RULES.

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BIBLIOGRAPHY

Basic:

- Auria Apilluelo, José M.; Ibáñez Carabantes, Pedro; Ubieta Artur, Pedro. Dibujo industrial : conjuntos y despieces. 2a ed. Madrid [etc.]: Paraninfo, 2005. ISBN 8497323904.
- Félez, Jesús. Dibujo industrial. 3a ed. Madrid: Síntesis, 2009. ISBN 8477383316.
- Preciado, Candido. Normalización del dibujo técnico. San Sebastián: Donostiarra, 2009. ISBN 9788470633096.
- Hernández Abad, Francisco. Ingeniería gráfica : introducción a la normalización. 3a ed. Terrassa: ETSEIAT Departamento de Expresión Gráfica en la Ingeniería, 2008. ISBN 8460946592.
- Álvarez Bengoa, Víctor. Dibujo lineal. San Sebastián: Donostiarra, 1997. ISBN 8470631292.



RESOURCES

Computer material:

- Apunts de dibuix tècnic
- Exercicis teòrics i pràctics