

## 340024 - EXGR-N2017 - Graphic Expression

Coordinating unit:	340 - EPSEVG - Vilanova i la Geltrú School of Engineering		
Teaching unit:	717 - EGE - Department of Engineering Presentation		
Academic year:	2019		
Degree:	BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory) BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory) BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory) BACHELOR'S DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)		
ECTS credits:	6	Teaching languages:	Catalan

### Teaching staff

Coordinator:	Jordi Ortiz-Domènech
Others:	Jordi Ortiz-Domènech, Gerard Sanz, Alejandro Trejo, Daniel Espín, José María Ibañez, David Valencia

### Degree competences to which the subject contributes

#### Specific:

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

### Learning objectives of the subject

Introduce concepts, techniques and methods in the area of Graphical Expression in Engineering.  
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

Total learning time: 150h	Hours large group:	30h	20.00%
	Hours medium group:	0h	0.00%
	Hours small group:	30h	20.00%
	Guided activities:	0h	0.00%
	Self study:	90h	60.00%

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### Content

1. Plane Geometry	Learning time: 4h Theory classes: 4h
Description: .	
2. Space Geometry	Learning time: 26h Theory classes: 26h
Description: Technical standards of representation: views, cuts, threads, dimensions, introduction to the representation of systems and industrial assemblies Specific objectives: .	
(ENG) 5.- Pràctiques de laboratori	Learning time: 30h Laboratory classes: 30h
Description: Guided practices throughout the course. Exercises to apply knowledge	

### Qualification system

### Regulations for carrying out activities

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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: Sintesis, 2009. ISBN 8477383316.

Preciado, Candido. Normalización del dibujo técnico. San Sebastián: Donostiarra, 2009. ISBN 9788470633096.

Hernández Abad, Francisco [et al.]. Ingeniería gráfica : introducción a la normalización. 2a ed. Terrassa: ETSEIAT. Departamento de Expresión Gráfica en la Ingeniería, 2006. ISBN 8460946592.

Álvarez Bengoa, Víctor. Dibujo lineal. San Sebastián: Donostiarra, 1997. ISBN 8470631292.

#### Others resources:

##### Computer material

Apunts de dibuix tècnic

Exercicis teòrics i pràctics