

## Course guides

### 860007 - 11003EGR - Graphic Expression

Last modified: 11/07/2016

**Unit in charge:** Manresa School of Engineering  
**Teaching unit:** 860 - EEI - Igualada School of Engineering.

**Degree:** BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Compulsory subject).  
BACHELOR'S DEGREE IN INDUSTRIAL SCHEDULING ENGINEERING (Syllabus 2011). (Compulsory subject).  
BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2009). (Compulsory subject).  
BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2016). (Compulsory subject).  
BACHELOR'S DEGREE IN CHEMICAL ENGINEERING (Syllabus 2016). (Compulsory subject).  
BACHELOR'S DEGREE IN INDUSTRIAL SCHEDULING ENGINEERING (Syllabus 2011). (Compulsory subject).

**Academic year:** 2017    **ECTS Credits:** 6.0    **Languages:** Catalan

#### LECTURER

**Coordinating lecturer:** ANTONI ALBAREDA MUSSONS

**Others:** MIQUEL SOLE GUSTEMS

#### DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

**Specific:**

2. (ENG)Capacitat de visió espacial i coneixement de les tècniques de representació gràfica, tant per mètodes tradicionals de geometria mètrica i geometria descriptiva, com mitjançant les aplicacions de disseny assistit per ordinador.

**Transversal:**

1. SELF-DIRECTED LEARNING - Level 1. Completing set tasks within established deadlines. Working with recommended information sources according to the guidelines set by lecturers.

#### TEACHING METHODOLOGY

#### LEARNING OBJECTIVES OF THE SUBJECT

#### STUDY LOAD

| Type               | Hours | Percentage |
|--------------------|-------|------------|
| Hours large group  | 30,0  | 20.00      |
| Hours medium group | 30,0  | 20.00      |
| Self study         | 90,0  | 60.00      |

**Total learning time:** 150 h

## CONTENTS

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### (ENG) -SISTEMA DIÈDRIC

**Full-or-part-time:** 26 h

Theory classes: 13h

Practical classes: 13h

### (ENG) -PERSPECTIVA

**Full-or-part-time:** 18 h

Theory classes: 9h

Practical classes: 9h

### (ENG) -CAD

**Full-or-part-time:** 16 h

Theory classes: 8h

Practical classes: 8h

## GRADING SYSTEM

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## BIBLIOGRAPHY

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### Basic:

- Comasòlives Font, R.. Sistema dièdric. Barcelona: Edicions UPC, 2001. ISBN 8483014335.
- Villanueva Ll.; Sánchez, J. A.. Temes clau de dibuix tècnic. 1. Barcelona: Edicions UPC, 1991. ISBN 84-7653-119-2.
- Tajadura Zapiain, José Antonio; López Fernández, Javier. Autocad avanzado 2002. Madrid: Mc Graw-Hill, cop. 2002. ISBN 8448131029.

### Complementary:

- Rodríguez de Abajo, Francisco Javier. Geometría descriptiva I. Bilbao: Vasco Americana, 1964-1982. ISBN 9788470633539.
- Rodríguez de Abajo, F. Javier; Álvarez Bengoa, Víctor. Curso de dibujo geométrico y de croquización. 7ª ed. Alcoy: Ed. Marfil, 1981. ISBN 8426800106.
- Rodríguez de Abajo, Francisco Javier. Geometría descriptiva, vol. 4., Sistema de perspectiva axonométrica. Bilbao: Vasco Americana, 1964-1982. ISBN 9788470633539.
- Izquierdo Asensi, Fernando. Geometría descriptiva. 26a ed. ampl. y rev. Madrid: Fernando Izquierdo Asensi, DL 2008. ISBN 8492210982 (O.C.).
- Izquierdo Asensi, Fernando. Ejercicios de geometría descriptiva. 16a ed. corregida. Madrid: s. n, DL 2009. ISBN 9788492210931 (O.C.).
- Sánchez Gallego, Juan Antonio. Geometría descriptiva: sistemas de proyección cilíndrica [on line]. Barcelona: Edicions UPC, 1997 [Consultation: 15/05/2015]. Available on: <http://upcommons.upc.edu/l1ibres/handle/2099.3/36345>. ISBN 8483012219.