



Course guide

820421 - AEGDM - Further Graphic Expression. Mechanical Design

Last modified: 27/05/2024

Unit in charge: Barcelona East School of Engineering
Teaching unit: 717 - DEGD - Department of Engineering Graphics and Design.
Degree: BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Compulsory subject).
Academic year: 2024 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: JORDI TORNER RIBE

Others: Primer quadrimestre:
SERGIO GÓMEZ GONZÁLEZ - Grup: M11, Grup: M12
OSCAR HERNANDO RUPEREZ - Grup: T12
JORDI IVERN CACHO - Grup: T11
JORDI TORNER RIBE - Grup: M13

Segon quadrimestre:
OSCAR FARRERONS VIDAL - Grup: M12
JORDI IVERN CACHO - Grup: M11
SERGIO SANTIAGO SACRISTAN - Grup: T11
JORDI TORNER RIBE - Grup: M11

PRIOR SKILLS

Having successfully completed Graphic Expression

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

1. Understand and apply graphic engineering techniques.

Transversal:

3. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.

TEACHING METHODOLOGY

The course employs narrative methodology by 20%, individual work by 40%, work in groups by 20% and project-based learning by 20%.

No reassessment test is performed.

LEARNING OBJECTIVES OF THE SUBJECT

Understand the techniques of cad systems.

Knowing the basic standards relating to technical drawings.

Learn the latest techniques in computer aided design.

Enhance spatial ability.

To introduce and practice the rules of graphing techniques most commonly used in engineering.



STUDY LOAD

Type	Hours	Percentage
Hours small group	45,0	30.00
Self study	90,0	60.00
Guided activities	15,0	10.00

Total learning time: 150 h

CONTENTS

(ENG) 3D Modelling

Full-or-part-time: 50h

Practical classes: 12h

Guided activities: 5h

Self study : 33h

(ENG) Assemblies

Full-or-part-time: 50h

Practical classes: 12h

Guided activities: 5h

Self study : 33h

(ENG) 2D Drawings

Full-or-part-time: 50h

Practical classes: 12h

Guided activities: 5h

Self study : 33h

GRADING SYSTEM

1st test 20%

2nd test 20%

3rd test 30%

Final Project 20%

Exercises 10%

BIBLIOGRAPHY

Basic:

- Gómez González, Sergio. El Gran libro de SolidWorks. 2a ed. Barcelona: Marcombo, 2015. ISBN 9788426721730.

- Gómez González, Sergio; Torner Ribé, Jordi. Grasshopper para Rhinoceros e impresión 3D. Barcelona: Marcombo, 2016. ISBN 9788426722751.

- Gu, Ning [ed]; Wang, Xiangyu [ed]. Computational design methods and technologies : applications in CAD, CAM and CAE education [on line]. Hershey PA: IGI Global, 2012 [Consultation: 15/04/2020]. Available on: <https://ebookcentral.proquest.com/lib/upcatalunya-ebooks/detail.action?docID=3311562>. ISBN 9781613501801.