29703 - Graphic expression and computer-assisted design

Información del Plan Docente

Academic Year	2016/17
Academic center	110 - Escuela de Ingeniería y Arquitectura
Degree	434 - Bachelor's Degree in Mechanical Engineering
ECTS	6.0
Course	1
Period	Half-yearly
Subject Type	Basic Education
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

5.2.Learning activities

5.3.Program

Standardization and Industrial Drawing

- Intro duction to Graphic Expression.

- Standardization and Computer Aided Design.
- Tools and equipment for drawing.
- Formats, scales, line types and writing.
- Diedric views. Representation of threads and gears.
- Cuts and sections.
- Dim ensioning.

Diedric system

- Representation of point, line and plane.
- Intersection of lines and planes.
- Parallelism.
- Perpendicularity.
- Change of Plans Projection.
- Partial View Single and Double.
- Giration.
- Projection elements to a plane.
- Measurement of distances.
- Measurement of angles.

Surfaces

- Contour apparent and representation of surfaces.
- Defining and building surfaces.
- Flat sections and intersection straight.
- Intersection of surfaces.
- Development of surfaces.
- Applications: Elbows and adapters.

System dimension drawings

- Representation of the point, the line and the plane.
- Status of lines in a plane.
- Find the given slope plane passing through a line.
- Intersection of lines and planes.
- Resolution of roofs of buildings.

PRACTICAL CLASSES.

1. Explanation Command CAD package.
2. Realization, guided by the teacher, one-piece 2D.
3. Making a single piece 2D medium complexity.
4. Individual Making a 2D piece of high complexity.
5. Using symbol libraries with blocks and attributes.
6. Creating a complete plan with title block and file printing.

5.4.Planning and scheduling

5.5.Bibliography and recomended resources