Universidad Zaragoza

Academic Year/course: 2023/24

28616 - Graphic Expression of Construction Technologies

Syllabus Information

Academic year: 2023/24
Subject: 28616 - Graphic Expression of Construction Technologies
Faculty / School: 175 - Escuela Universitaria Politécnica de La Almunia
Degree: 422 - Bachelor's Degree in Building Engineering
ECTS: 6.0
Year: 2
Semester: Second semester
Subject type: Compulsory
Module:

1. General information

The essential goal of this subject is to deepen the aspects of graphic expression in a more technical way, technological and constructive

An agenda that corresponds to each of the chapters that we may encounter is proposed, in order to cover most of the planimetric documents that will be required for the usual and normal development of a building project.

Theoretical knowledge that will be covered in other subjects of the Degree, going into more detail on the more practical aspects and on how each of the elements that make up the drawing must be represented in each case so that they are complete documents, capable of expressing what is desired and that can be read by another competent technician.

The subject is eminently practical and requires a continuous relationship between students and teachers in order to follow and develop correctly the proposed works that accompany each of the topics.

These approaches and goals are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030(https://www.un.org/sustainabledevelopment/es/), so that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to their achievement

SDG 4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all

SDG 5. Achieving gender equality and empowering all women and girls

2. Learning results

Ability to interpret and prepare the graphic documentation required in a basic architectural and building project

Ability to interpret and elaborate all the graphic documentation of a basic architectural project.

Ability to perform data acquisition

Ability to carry out plan survey

Ability to apply the latest generation of CAD and BIM programs to the infographic development of building projects.

Ability to obtain building project plans.

3. Syllabus

Development of the graphic documentation of a Basic and Execution Project according to the CTE

1. Regulations
    1. Approach to a PGOU
    2. Minimum housing
    3. Minimum measurements
    4. Ergonomics
2. Graphic Documentation
    1. Urban information plans
    2. Floor plans
    3. Raised
    4. Sections
3. Structure
    1. Typology
    2. Representation
    3. Vertical elements

    4. Horizontal elements
    5. Foundations
    6. Soil containment
4. Facilities
    1. Typology and systems
    2. Representation
    3. Sanitation
    4. ACS and AFS
    5. Air conditioning
    6. Electricity
5. Construction Solutions
6. 3D / BIM modeling
7. Representation systems

4. Academic activities

- Workshop type classes
- Classroom practice/seminars/workshops
- Computer internships
- Expository classes
- Group tutoring
- Individual tutoring: may be face-to-face or virtual.

5. Assessment system

Assessment by term

Graphic definition of a project

- Information and distribution plans 20%
- Structure 20
- Facilities 20
- Construction details 20
- Presentation 20

Final Assessment

Presentation of a 100% project