Universidad Zaragoza

Year : 2019/20

30711 - Construction 1

Syllabus Information

Academic Year: 2019/20
Subject: 30711 - Construction 1
Faculty / School: 110 -

Degree: 470 - Bachelor's Degree in Architecture Studies

ECTS: 6.0
Year: 2
Semester: First semester
Subject Type: Compulsory
Module: ---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The learning process designed for this course is based on the following:

The course consists of a theoretical part in which the evolution of knowledge about historical and current construction and structural building solutions are introduced.

In parallel, practical activities are devoted to the analysis of structural solutions in leading architectural references of residential buildings. The exercises are performed in groups of 3-4 students during the semester and are supervised during the course, thus allowing a continuous evaluation.

Complementarily on site works visits and practical exercises are done in class.

4.2.Learning tasks

The program that students are offered to help them achieve the expected results includes

Total hours of student work: 150 hours (6 ECTS)

Theoretical credits: 75 hours (3 ECTS)

Practical credits: 75 hours (3 ECTS)

Classroom activities

1. Theoretical and problems resolution classes (large group).
2. Practical classes (intermediate group).
    - Case study discussions.
    - Tutorial sessions.
3. Visits to on-site building constructions, buildings or conferences.
4. Scheduled tutoring.
5. Written test

Distance activities

6. Studying and individual work.
7. Performing tasks and projects individually and/or in small groups.

4.3.Syllabus

- Introduction to building in Architecture: basic terminology, types of buildings and construction, construction elements of buildings and their functions.

- Introduction to the construction of structural elements: structure and project, construction of structural elements throughout the history.

- Soils and Foundation: field survey, earthwork, footings, slabs, piles, retaining walls.

- Pillars and slabs: one-way slabs, waffle slabs, solid slabs, and other types of floor structures. Reinforced concrete and metal pillars.

- Masonry walls: brick , thermal clay blocks, concrete blocks.

- Vertical Communications: stairs and elevators.

4.4.Course planning and calendar

Theoretical classes of 2 hours per week according to the School schedule.

Practical classes of 2 hours per week according to the School schedule.

The course assignments will have partial pre-delivery and final delivery dates that will be defined at the beginning of the course.

The date of the theoretical test will be included in the School exams calendar.

4.5.Bibliography and recommended resources