

30747 - Constructive Solutions Concerning Architecture

Syllabus Information

Academic year: 2024/25

Subject: 30747 - Constructive Solutions Concerning Architecture

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

Degree: 470 - Bachelor's Degree in Architecture Studies

ECTS: 6.0

Year: 5

Semester: Second semester

Subject type: Optional

Module:

1. General information

The subject and its intended outcomes address the following considerations and objectives:

1. Study of the anatomy, physiology, and lexicon of Architecture from the scale of the construction detail as an all-encompassing fact that links it to the real construction process.
2. Learning to propose integrated constructive and structural solutions, from the detail, in the architectural project process.
3. Conveying to the student a working method that allows understanding construction as another discipline within the field of architecture, delving into architectural, functional, energy, and environmental requirements.
4. Understanding the fundamental role of the constructive solutions used from a holistic point of view, including energy, comfort, and circularity.
5. Exploring the concept and details specific to industrialized architecture.

2. Learning results

The student, in order to pass this course, must demonstrate the following outcomes:

- Recognize and understand the anatomy, physiology, and lexicon of construction.
- Develop construction details and technical specifications of materials that express the architectural fact and its construction.
- Understand the balance between design, structure, and construction through the construction detail.
- Be able to develop construction details that not only express the architectural fact and its construction but also meet current requirements in terms of comfort, energy, and material circularity.

3. Syllabus

1. Analysis of a building with a steel structure.
2. Analysis of a building with a reinforced concrete structure.
3. Analysis of a building with a wooden structure.

4. Academic activities

Theoretical-practical classes of 4 hours per week according to the School's schedule, with two of these being theoretical and taught by the professors, and the other two dedicated to student work under the supervision of the professors.

The course work consists of intermediate submissions and a final delivery, with dates to be determined at the beginning of the course.

The subject is taught in theoretical and practical sessions throughout the course and is evaluated with a practical exercise developed during the course (with two intermediate submissions and a final one).

5. Assessment system

The work carried out by the student is evaluated continuously, through class attendance, and after completing two intermediate submissions and a public presentation of the final project for the subject.

As stated in the UZ regulations, students who request it within the established period will have the option to take a final exam for the subject.

6. Sustainable Development Goals

11 - Sustainable Cities and Communities
13 - Climate Action