

## 30730 - Construction 3

### Syllabus Information

**Academic year:** 2024/25

**Subject:** 30730 - Construction 3

**Faculty / School:** 110 - Escuela de Ingeniería y Arquitectura

**Degree:** 470 - Bachelor's Degree in Architecture Studies

**ECTS:** 6.0

**Year:** 4

**Semester:** First semester

**Subject type:** Compulsory

**Module:**

### 1. General information

In the context of the degree program, the construction courses provide students with the technological and regulatory knowledge to ensure the integrity of the constructions and at the same time contribute to achieve high levels of comfort and health inside the buildings at low environmental

costs. Construction 3 mainly addresses the construction solutions applicable to residential architecture and other typologies that use conventional construction solutions, as well as their regulations of application. The constructive solutions in singular architecture are studied in Construction 3 more superficially, and are seen in greater depth in other compulsory subjects.

### 2. Learning results

- Knowledge of the construction systems applicable to residential building, and aptitude for their representation, construction, conservation, measurement and valuation methods.
- Know and use the technical vocabulary of construction.
- Knowledge and application of construction regulations.
- Acquisition of criteria for the correct choice of construction materials applicable to residential construction.
- Ability to understand the tectonic logic of the constructive solutions applicable to residential construction.
- Ability to recognize the architectural repercussions of each construction system and of each material in the construction site.
- Know how to elaborate construction details and technical prescriptions of construction systems applicable to residential building, expressing the architectural fact and its construction.

### 3. Syllabus

- Block I. Introduction
- Block II. Structural pre-dimensioning
- Block III. Basic requirements and basic demands
- Block IV. Enclosure and compartmentalization systems

### 4. Academic activities

- Lectures: sessions with the professor in which the course syllabus will be explained:
- Laboratory practices: where the development of the module project and the activity of the working group are supervised, with critical sessions.
- Assessment tests.

### 5. Assessment system

The subject will be evaluated by the continuous assessment system by means of the following activities:

- Initial pre-delivery of the practical exercise: 5 %
- Final delivery of the practical exercise: 55 % (minimum 5 out of 10)

The practical exercise will be carried out throughout the subject. The assessment will consider the mastery of the contents, use of terminology, accuracy of concepts, justification of arguments, autonomy, the student's analytical and critical capacity and the ability to work in a team and to communicate the results. In the event that the pre-delivery or delivery of the practical work is made after the deadline, it may lead to a reduction in the grade of up to 25%.

Students who pass the continuous assessment part of the course will be able to take the following exams:

- Theoretical written/graphic test/test : 40 % (minimum 5 out of 10)

If the student has not passed the continuous assessment activities during the semester, they will have the opportunity to pass the course by means of a global exam in two official exams.

## **6. Sustainable Development Goals**

7 - Affordable and Clean Energy

11 - Sustainable Cities and Communities

13 - Climate Action