

Academic Year/course: 2023/24

# 28780 - Measurements and Budgets

## **Syllabus Information**

Academic year: 2023/24

Subject: 28780 - Measurements and Budgets

Faculty / School: 175 - Escuela Universitaria Politécnica de La Almunia

Degree: 423 - Bachelor's Degree in Civil Engineering

**ECTS**: 6.0 **Year**: 4

Semester: First semester Subject type: Optional

Module:

### 1. General information

Provide the student with the necessary competences to carry out an adequate economic management of the works, from the point of view of the budget, in accordance with their professional attributions.

These objectives are aligned with some of the Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 ( )<a href="https://www.un.org/sustainabledevelopment/es/">https://www.un.org/sustainabledevelopment/es/</a>), such that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to their achievement.

8.4 By 2030, progressively improve global resource efficient production and consumption and aim todecouple economic growth from environmental degradation, in line with the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, starting with developed countries.

12.2 By 2030, to achieve sustainable management and efficient use of natural resources.

12.5 By 2030, significantly reduce waste generation through prevention, reduction, recycling and reuse.

## 2. Learning results

Students will be able to prepare and calculate basic, auxiliary, unit and decomposed prices of the work units; analyze and control costs during the construction process; prepare budgets.

He will have an overall view from the economic point of view of the work, able to analyze other budgets, work units, make comparisons, understand the process of work certifications.

### 3. Syllabus

Unit 1: Agents of the process; The Graduate in Civil Engineering and the economics of the work.

Unit 2: General concepts of measurements and budgets.

Unit 3: Project Documents; The Budget.

Unit 4: Work units.

Unit 5: Prices.

Unit 6: Costs.

Unit 7: Awarding processes.

Unit 8: Execution processes; Budget Chapters.

Unit 9: Work certifications.

Unit 10: Computer tools

#### 4. Academic activities

Participatory lectures

The contents of the subject will be presented, with a practical orientation towards measurements and budgets of works.

· Problem solving and cases

Practical problems will be solved by calculating yields, decomposed unit prices and measurements.

They will be carried out manually as well as with measurement and budgeting software.

It includes both evaluable teaching assignments and the development of classroom practices.

- · Study and personal work (including evaluable independent work). Course practice)
- · Assessment tests.

### 5. Assessment system

· Continuous assessment mode.

In the continuous assessment model, the teacher will assess the student's participation in the theoretical classes, the demonstration of the knowledge acquired and the ability to solve problems that the teacher will observe in the practical classes.

Likewise, the work/projects carried out by the students will be evaluated. Finally, students must take and pass several oral or written tests ("continuous assessment exercises") of each of the parts (or blocks) of the subject.

In addition, students must pass a test of knowledge of specific technical vocabulary of construction to pass the subject

Any student who does not pass the required minimums of the practical tests, exercises or academic papers proposed in the subject, will automatically pass to the non-continuous assessment model.

In order to be eligible for the Continuous Assessment system, at least 80% of the classroom activities must be attended.

The "Course Practicum" will be mandatory to pass the subject.

· Non-continuous assessment mode. (Final assessment)

The assessment consists of one or more tests of theory and practice of the contents of the subject at the date of the call.

Therewill be a final exam with a theoretical part (40%) and a practical part (60%), being necessary to pass both parts with a score of 2 out of 4 in the theoretical part and 3 out of 6 in the practical part . In the practical part, the performances of prices that do not require their calculation are not considered evaluable as they only have to transcribe the statement)

A mandatory "Course Practicum" will be required to pass the subject.

Also, at the date of the call, students must pass a test of knowledge of specific technical vocabulary of construction to pass the subject