

28923 - Projects

Syllabus Information

Academic year: 2024/25

Subject: 28923 - Projects

Faculty / School: 201 - Escuela Politécnica Superior

Degree: 583 - Degree in Rural and Agri-Food Engineering

ECTS: 6.0

Year: 3

Semester: First semester

Subject type: Compulsory

Module:

1. General information

The main objective of this subject is to train the student to be able to interpret and write any type of project related to the specialty being studied, to draw up the specifications and terms and conditions of these projects, to study the occupational risks involved in the execution of the works, to make an economic assessment of the works and to plan and plan the execution of the works, economically evaluate the works and planning and programming of these projects.

These approaches and objectives are aligned with the Sustainable Development Goals (SDGs) of the 2030 Agenda following:

Goal 2: Ending hunger

Goal 11: Make cities more inclusive, safe, resilient and sustainable Goal 13: Adopt urgent measures to combat climate change and its effects and, in particular, with the objectives: 2.3, 2.4, 2.5, 2.a, 11.6, 11.a and 13.b

2. Learning results

Interpret projects of all types, both classical and those that comply with the most modern project concepts, knowing how to describe the different documents that make up a project subject to processing, knowing the content of the same and knowing how to interpret them correctly. Based on these documents, it will be possible to predict how the project will be executed at in order to be able to analyze the risks and opportunities corresponding to the project. Identify economic impacts produced by the activities derived from the execution of the projects and the start-up of the corresponding activities.

Use with sufficient skill the computer tools for the drafting and preparation of budgets, as well as and the planning and scheduling of projects valid for projects of all types. In this case we will use and the MS Project program for budgeting.

Budgeting projects of any type related to the specialty, deepening in the knowledge of the definition of the necessary work units, as well as in the definition of their price, and the scheduling in time and cost of the execution of the compensatory measures.

Describe the corrective and preventive measures for occupational hazards that are applicable, as well as their follow-up of these measures.

Recognize, within the framework of professional competencies, the fulfillment of:

- Municipal ordinances.
- Urban planning legality.
- Safety regulations.
- Sanitary facilities.
- Environmental.

Any others that may be required. Convey information, orally and in writing.

These learning results are aligned with SDGs 2, 11 and 13.

3. Syllabus

1 Engineering and the company.

2 The Engineering Project.

3 Project documents.

4 Memory and annexes to the memory of a project.

5 Drawings of a project.

6 Project specifications. Concept and applications

7 Project specifications. General conditions and technical requirements.

- 8 Project specifications. Economic, optional and legal requirements.
- 9 Project budgets. Definition and parts thereof
- 10 Project budgets, Measurements, price lists and general budgets.
- 11 Price revisions and contradictory prices in the project budget.
- 12 Awarding of projects and works. The Public Administration Contracts Law.
- 13 Health and safety studies on construction sites. Legislation and contents.
- 14 Environmental impact studies in projects. Legislation and contents.
- 15 Project scheduling and control. Concept and types of programming. Applications.
- 16 Project scheduling and control. Gantt diagrams and PERT method. Network technique and methodology.
- 17 Project scheduling and control. Definition of times and clearances. Calculation of the same.
- 18 Project scheduling and control. CPM methods.
- 19 Project scheduling and control. Resource leveling methods.
- 20 Project scheduling and control. Example 1.
- 21 Project scheduling and control. Example 2.
- 22 Project scheduling and control. Example 3.
- 23 Regulations and legislation applicable to projects. Concepts and classifications.
- 24 General regulations and legislation.
- 25 Mandatory regulations and legislation in building and civil works.
- 26 Mandatory regulations and legislation for installations. Part one.
- 27 Mandatory regulations and legislation for installations. Part two.
- 28 Regulations and legislation of an optional nature. Technological building standards. Part one.
- 29 Regulations and legislation of an optional nature. Technological building standards. Part two.
- 30 UNE standards, CEN standards and technical engineering. Applications.

4. Academic activities

Theoretical lectures. They will consist of lectures, motivating student participation.

Its purpose is to transmit the notions of the subject in a clear, systematic and synthetic way. The aim is to awaken the interest in the subject and motivate the student in his individual study and that the lecture is a dialog in which not only is exposed but also questions are asked, doubts are solved, discussed and debated. (20 hours)

Practices and real case studies, in which the student will work throughout the course using specific software for some of the activities . (40 hours)

Study, Teaching and other activities (84 hours)

Assessment (6 hours).

5. Assessment system

The assessment system of the course will be global, face-to-face, on the date officially announced by the Center.

The assessment activities will be of two types:

- Written tests on the contents of the subject. The contents group together knowledge acquired in a complementary manner through classroom lectures and work done by students under the supervision of the teacher . This written test will be worth 50% of the final grade of the subject, Papers presented. It comprises the other 50% of the grade. Both the written documentation submitted to and the oral presentation of the same to the teachers of the subject will be valued.

In relation to the 2030 Agenda, students' acquisition of competencies related to SDGs 2, 11 and 13 will be assessed in the written exam will be assessed in the written examination of the theoretical part of the

Assessment criteria

The assessment system will be the same in all the calls proposed by the Center.

To pass the subject it will be necessary to achieve a minimum score of 4 points out of 10 in each of the types of evaluation activities. If the minimum requirements in the evaluation activities of the assessment are not met, the subject will not be considered approved even if the final average grade is equal to or higher than 5, . In this case, the grade that will appear in the minutes will be Fail with a grade of 4.

The grades obtained in any of the assessment activities, in the case that these are equal or higher than 4, will be kept until September.

Subject success rates for the last three years:2020/21: 100%; 2021/22: 97,14%; 2022/23 100%

6. Sustainable Development Goals

- 2 - Zero Hunger
- 11 - Sustainable Cities and Communities
- 13 - Climate Action