

## 29630 - Project Office

### Syllabus Information

**Academic Year:** 2020/21

**Subject:** 29630 - Project Office

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

**Degree:** 430 - Bachelor's Degree in Electrical Engineering

**ECTS:** 6.0

**Year:** 4

**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 teaching methodology will be structured in four levels: theory classes, problems, laboratory sessions and supervised practices.

In the theory classes the fundamental concepts and standards relating to the implementation of projects and electrical drawings, morphology and project methodology, the activity of the technical offices and work are done on it will be presented: Likewise, will into consideration the pre-project studies, planning, programming and project management and technical documentation to develop each topic illustrated with numerous examples.

In the kinds of problems, students perform exercises, cases, and problems, such as planning and scheduling the execution of a project under the supervision of a teacher.

The laboratory practices will be developed in small groups, where the student will handle the necessary for the execution of the software of the proposed work.

### 4.2.Learning tasks

The course includes the following learning tasks:

1) Teaching type 1: Lectures (30h). Explanation of contents. It is based on the exhibition in the classroom theoretical concepts, using slate and teaching aids and teaching support (slides, videos, software presentations, ...).

2) Teaching type 2: Classes of problems (15h).. Kinds of problems in which the teacher will present various exercises based on the concepts explained in the theory classes. For this learning process, individual attention in the classroom will be established, resolving the difficulties that every student is in solving problems and cases.

- 3) Teaching type 3: Lab (15h). Practice in computer rooms. It is based on the explanation, approach problem-solving cases, and the use of applications used in development projects: Project, Open Project, Visio, layout and presentation tools, ...
- 4) Teaching type 6: supervised practical work. Sheltered practices monitoring and control of the proposed work, individually for each group and by mandatory appointment at the office.
- 5) Teaching type 7: Personal study. Individual dedication necessary to consolidate a correct learning process.
- 6) Teaching type 8: Assessment Test. In addition to the qualifying function, evaluation is also a learning tool with which the student tests the degree of understanding and assimilation that has reached the matter.
- 7) Other activities: Tutoring. Direct student care, identification of learning problems, orientation in the subject, attention to exercises and assignments, etc.

### **4.3.Syllabus**

The course will address the following topics:

- T.1.- REGULATIONS AND REPRESENTATION OF ELECTRICAL PLANS AND SCHEMES.
  - 1.1.- GENERAL RULES FOR CONSULTATION AND REPRESENTATION.
  - 1.2.- TYPES OF OUTLINES, DIAGRAMS AND TABLES.
  - 1.3.- TYPES OF PLANS USED IN ELECTRICAL PROJECTS.
  - 1.4.- GENERAL AND INDIVIDUAL IDENTIFICATION OF ELEMENTS ELECTROTECHNICAL.
- T.2.- GENERAL RULES FOR PROJECT DEVELOPMENT.
  - 2.1.- TECHNICAL OFFICE IN THE STRUCTURE OF COMPANY.
  - 2.2.- UNE 157001: 2002. GENERAL RULES.
  - 2.3.- TECHNICAL PROJECTS IN THE FIELD OF ELECTRICITY.
  - 2.4.- PROJECTS SPECIALTY: LOW VOLTAGE, TRANSFORMERS, HIGH VOLTAGE LINES.
- T.3.- PROJECT MANAGEMENT.
  - 3.1.- INTRODUCTION TO PROJECT MANAGEMENT
  - 3.2.- INTEGRATION PROJECT
  - 3.3.- DEFINITION AND SCOPE OF THE PROJECT
  - 3.4.- DEADLINES PROJECT
  - 3.5.- TECHNICAL GRAPHICS PROJECT MANAGEMENT
- T.4.- APPLICATION REGULATIONS IN PROJECT DESIGN ELECTRICAL.
  - 4.1.- INDUSTRIAL ENGINEER.
  - 4.2.- APPLICATION OF REGULATIONS OFFICIAL OF ELECTRIC FIELD.
  - 4.3.- APPLICATION OF REGULACIÓN OF ELECTRICAL COMPANIES.
  - 4.4.- APPLICATION OF COMPLEMENTS REGULATIONS.
- T.5.- PROJECT IMPLEMENTATION.
  - 5.1.- POWERS, AUTHORIZATION AND COMMISSIONING OF FACILITIES ELECTRICAL.
  - 5.2.- PLAYERS INVOLVED IN THE LEGALIZATION OF FACILITIES.
  - 5.3.- CONTROL AND TECHNICAL MANAGEMENT OF PROJECTS.

### **4.4.Course planning and calendar**

The schedule of lectures and problems, as well as the practice sessions in the laboratory, are held according to the schedule established by the EINA and published prior to the start date of the course on the website of the Centre and bulletin boards.

At the beginning of the course will be informed of delivery dates of partial project reports and delivery and presentation of the final project.

### **4.5.Bibliography and recommended resources**

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=29630&Identificador=14513>