

**Información del Plan Docente**

<b>Academic Year</b>	2017/18
<b>Faculty / School</b>	110 - Escuela de Ingeniería y Arquitectura
<b>Degree</b>	434 - Bachelor's Degree in Mechanical Engineering
<b>ECTS</b>	6.0
<b>Year</b>	4
<b>Semester</b>	First semester
<b>Subject Type</b>	Compulsory
<b>Module</b>	---

**1.General information****1.1.Introduction****1.2.Recommendations to take this course****1.3.Context and importance of this course in the degree****1.4.Activities and key dates****2.Learning goals****2.1.Learning goals****2.2.Importance of learning goals****3.Aims of the course and competences****3.1.Aims of the course****3.2.Competences****4.Assessment (1st and 2nd call)****4.1.Assessment tasks (description of tasks, marking system and assessment criteria)****5.Methodology, learning tasks, syllabus and resources****5.1.Methodological overview**

The methodology followed in this course is oriented towards achievement of the learning objectives. It is based on participation and the active role of the student favors the development of communication and decision-making skills. A wide range of teaching and learning tasks are implemented, such as lectures, guided assignments, laboratory sessions, autonomous work, and tutorials.

Students are expected to participate actively in the class throughout the semester.

## 29730 - Project Office

Further information regarding the course will be provided on the first day of class.

### 5.2.Learning tasks

The course includes 6 ECTS organized according to:

- Lectures (1.2 ECTS): 30 hours.
- Laboratory sessions (0.6 ECTS): 15 hours.
- Guided assignments (0.6 ECTS): 15 hours.
- Autonomous work (1.8 ECTS): 45 hours.
- Tutorials (1.8 ECTS): 45 hours.

**Lectures:** the professor will explain the theoretical contents of the course and solve illustrative applied problems. These problems and exercises can be found in the problem set provided at the beginning of the semester. Lectures run for 3 weekly hours. Although it is not a mandatory activity, regular attendance is highly recommended.

**Laboratory sessions:** sessions will take place every 2 weeks (5 sessions in total) and last 3 hours each. Students will work together in groups actively doing tasks such as practical demonstrations, measurements, calculations, and the use of graphical and analytical methods.

**Guided assignments:** students will complete assignments, problems and exercises related to concepts seen in laboratory sessions and lectures. They will be submitted at the beginning of every laboratory sessions to be discussed and analyzed. If assignments are submitted later, students will not be able to take the assessment test.

**Autonomous work:** students are expected to spend about 90 hours to study theory, solve problems, prepare lab sessions, and take exams.

**Tutorials:** the professor's office hours will be posted on Moodle and the degree website to assist students with questions and doubts. It is beneficial for the student to come with clear and specific questions.

### 5.3.Syllabus

#### T.1.- PROJECT MANAGEMENT

##### 1.1. INTRODUCTION TO MANAGEMENT AND PROJECT MANAGEMENT

##### 1.2. INTEGRATION PROJECT

##### 1.3. DEFINITION AND SCOPE OF THE PROJECT

1.4. DEADLINES PROJECT

1.5. GRAPHIC PROJECT MANAGEMENT TECHNIQUES

T.2.- GENERAL CRITERIA FOR PROJECT DEVELOPMENT

2.1. UNE 157001: 2002. GENERAL CRITERIA.

2.2. STRUCTURE OF A TECHNICAL PROJECT

2.3. TECHNICAL PROJECTS IN THE FIELD OF MECHANICS

2.4. PROJECTS SPECIALTY

T.3.- APPLICATION REGULATIONS IN PROJECT DESIGN MECHANICS.

3.1.- POWERS GRAD - Engineer Mechanic.

3.2 APPLICATION OF OFFICIAL RULES FIELD MECHANIC.

SUPPLEMENTARY REGULATIONS 3.3 APPLICATION.

T.4.- project implementation.

4.1.- POWERS, OK, PROBATE AND COMMISSIONING OF INDUSTRIAL FACILITIES.

4.2.- AGENTS INVOLVED IN THE LEGALIZATION OF INDUSTRIAL FACILITIES.

4.3. CONTROL AND TECHNICAL MANAGEMENT OF PROJECTS.

T.5.- REPRESENTATION OF SCHEMES REGULATIONS AND PLANS IN ENGINEERING PROJECTS.

5.1 GENERAL RULES FOR CONSULTATION AND REPRESENTATION.

5.2.- TYPES OF PLANS USED IN MECHANICAL PROJECTS.

- Planes OF INDUSTRIAL BUILDINGS.
- Planes DISTRIBUTION
- Planes OF MACHINERY AND EQUIPMENT
- Planes FACILITIES

5.3.- PLANS REQUIRED DEPENDING ON PROJECT.

#### 5.4.Course planning and calendar

For further details concerning the timetable, classroom and further information regarding this course please refer to the "Escuela de Ingeniería y Arquitectura " website ( <https://eina.unizar.es/> )

#### 5.5.Bibliography and recommended resources

[BB: Basic Bibliography / BC: Additional Bibliography]

- [BB] Manuel de Cos Castillo. Teoría general del Proyecto volúmenes 1 y 2. Editorial Síntesis. 1997
- Norms: UNE, ISO, Código Técnico de la Edificación, EAE y EHE