

## 30177 - Project Office

### Syllabus Information

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**Academic Year:** 2021/22

**Subject:** 30177 - Project Office

**Faculty / School:** 179 - Centro Universitario de la Defensa - Zaragoza

**Degree:** 563 - Bachelor's Degree in Industrial Organisational Engineering

**ECTS:** 4.5

**Year:** 4

**Semester:** First semester

**Subject Type:** Compulsory

**Module:**

## 1. General information

### 1.1. Aims of the course

The main aim of this course is that the learner will be competent to manage all the project complexity, which is a consequence of the imprecise necessities definition, teamwork, applicable documentation and standards, relationships between entities involved in the project and existence of different solutions.

Thus, the existing project management methodology that could be applied to the wide variety of technical or managerial projects in any scope of application (civil or military fields) is explained. This provides students with knowledge about the principal basic tools to define, design, plan, execute, monitor and control a project.

### 1.2. Context and importance of this course in the degree

The consideration of the Project Office course in the Industrial Organization Engineering Degree is justified not only in view of the basic and specific skills to be achieved by students, but also regarding the future activities to be carried out by an Army officer during their professional career after finishing the academic training in the military academies.

This course is eminently transversal, where learning outcomes achieved throughout preceding courses are used, and whose knowledge acquired will be posteriorly applied, for instance, in the Undergraduate Dissertation.

**Specialization in Defence:** This course contributes to the training of Army Officers, providing tools for training in values and developing the skills necessary for the development of the competencies and capabilities required by Army Officers in the future performance of their responsibilities.

### 1.3. Recommendations to take this course

It is recommended having passed the courses of Graphic expression and computer-assisted design (1<sup>st</sup> year of the degree), Company: Organization and Management (2<sup>nd</sup> year), and Logistics and Quality (3<sup>rd</sup> year).

## 2. Learning goals

### 2.1. Competences

The course should contribute to the acquisition of the following basic and specific skills:

1. Ability to conceive, design and implement engineering projects.
2. Ability to plan, budget, organize, manage and monitor tasks, people and resources.
3. Ability to solve problems and take decisions with initiative, creativity and critical reasoning.
4. Ability to analyze and evaluate the social and ecological impact of technical solutions, behaving ethically, with professional responsibility and social commitment, always striving for quality and continuous improvement.
5. Ability to work in a multidisciplinary group and in a multilingual setting.
6. Ability to manage information; skills to handle and apply technical specifications and the necessary legislation to practise engineering.

7. Knowledge and capacities to organize and manage projects. Be familiar with the structural organization and functions of a project management office.

## 2.2. Learning goals

In order to evaluate the acquisition of the competences included, the students should show the following learning outcomes:

1. Understand the interrelationships between all the influences factors related to the project
2. Interpret concepts and main standard documents related to industrial projects
3. Understand aspects and characteristics that affect technical studies of industrial activity
4. Accomplish the design, planning, execution and control of a project
5. Interpret and prepare the specific technical documentation of a project of their field of specialization

## 2.3. Importance of learning goals

This course is mainly related to engineering and management, that is to say, it provides the learning of concepts with immediate application and development, which are required for the realization of projects within the military or civil scope. Therefore, it is characterized for being a cross curricular course with particular importance with regards to Undergraduate Dissertation accomplishment.

Without considering the project application field, this methodology facilitates the best results achievement in relation to the main goals or basic principles of project management that are time, quality, cost and scope.

## 3. Assessment (1st and 2nd call)

### 3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The assessment differentiates two activities, a final project realization and the final examination about theoretical-practical knowledge. The student will pass the subject when the grade of each part is equal to or higher than five (5).

- **Practical work ? Final project (60%)**

Realization and oral presentation of a group work (3-4 students) putting into practice the main aspects of the project management methodology. If the final project was not be presented at the established deadline, the final grade considered would be equal to zero (0).

The final grade of the final project has to be equal to or greater than five (5) to be able to consider the examination part and pass the course. If the practical work (final project) was the only part passed, its grade will be considered at the second call.

Different control points could be accomplished throughout the course by the teachers as evaluated project deliverables.

- **Final examination (40%)**

The final assessment activity will consist of an examination about the main theoretical-practical concepts of the course.

The grade of the final examination has to be equal to or higher than five (5) to be able to consider the practical part (final project) and pass the course. If the final examination was the only part passed, its grade will be considered at the second call.

## 4. Methodology, learning tasks, syllabus and resources

### 4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. Following activities are defined:

- Lectures
- Practice sessions
- Seminar by experts in the field
- Tutorials

If this teaching could not be done in person for health reasons, it would be done telematically.

### 4.2. Learning tasks

During the course, a continuous assessment system could be implemented with several control points that could be evaluated by the professor.

The student will need to prepare a final project which consists of the realization of a work applied in the field of the degree,

which highlights the knowledge and skills acquired by the student during the course. This project includes a written report, accompanied by the material that is deemed appropriate, and an oral presentation.

The project will be carried out in groups of 3 or 4 people at most, distributing the roles of the project team between the group.

Practice sessions will be carried out in the class with the professor's supervision after the explanation of the corresponding theoretical concepts in the theory sessions. The remaining part of the work will be done by the group in an autonomous way.

The projects with the corresponding written report will be delivered in the requested format (hard and/or soft copy) to the professor in the requested dates.

The oral presentation of the project will be made with a multidisciplinary tribunal composed of professors of the Centro Universitario de la Defensa. The presentations will be held in the classroom in sessions of 15 minutes maximum per group with a round of questions. Powerpoint files are accepted but additional support media such as videos or files could be provided by the students.

Moodle platform will be used mainly as a digital repository of teaching materials including the following parts:

- Content area: class notes in the form of transparencies, reports of practices sessions and bibliography.
- Evaluation area: different blocks of deliverables will be created.
- News and announcements area: for the professor communication with the students

### 4.3. Syllabus

The course will address the following topics:

- Topic 1: Introduction. Project management fundamentals
- Topic 2: Integration management
- Topic 3: Scope management
- Topic 4: Time management
- Topic 5: Risk management
- Topic 6: Procurement management
- Topic 7: Quality management
- Topic 8: Cost management

### 4.4. Course planning and calendar

Relevant information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or in the moodle platform.

Following the syllabus defined in chapter 4.3, the presential hours included in the course are distributed as follows:

Unit	Theory sessions (hours)	Practice sessions (hours)
1. Introduction	2	3
2. Integration management	1	2,5
3. Scope management	2	3
4. Time management	3	3
5. Risk management	2	3
6. Procurement management	2	3
7. Quality management	1	3
8. Cost management	3	2
Theory sessions (hours)		16
Practice sessions (hours)		22,5
Oral presentations (final project)		5
Exam		1,5
Total (hours)		45

## 4.5. Bibliography and recommended resources

Bibliography available in <http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=30177>