**Technical Office** 

Academic Year: ( 2022 / 2023 )

Department assigned to the subject: Mechanical Engineering Department

Coordinating teacher: REVILLA TORREJON, ANTONIO JAVIER

Type: Compulsory ECTS Credits : 3.0

Year : 5 Semester : 2

# REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

No prerequisites.

## OBJECTIVES

By the end of this subject, students will be able to have:

1. Knowledge and understanding to develope, execute and manage industrial engineering projects, according to good practises, standards and regulations.

2. Awareness of the wider multidisciplinary context of engineering.

3. The ability to apply their knowledge and understanding to analyse engineering products, processes and methods.

4. The ability to apply their knowledge and understanding to develop and realise designs to meet defined and specified requirements.

5. The ability to conduct searches of literature, and to use data bases and other sources of information.

6. An awareness of the non-technical implications of engineering practice.

- 7. Function effectively as an individual and as a member of a team.
- 8. Demonstrate awareness of the health, safety and legal issues and responsibilities of

engineering practice, the impact of engineering solutions in a societal and environmental context, and commit to professional ethics, responsibilities and norms of engineering practice.

9. Demonstrate an awareness of project management and business practices, such as risk and change management, and understand their limitations.

## DESCRIPTION OF CONTENTS: PROGRAMME

- Project concept
- Project management methodology
- Project phases
- Project planning and control
- Project evaluation
- Project supply management
- Project organization types
- Classic documentary project organization
- Organizational structure and functions of a project office
- Legislation. Environmental Aspects

## LEARNING ACTIVITIES AND METHODOLOGY

Lectures, exercises, practical sessions, cases and assignments to be carried out by the students and discussed during the sessions, complementary readings.

#### ASSESSMENT SYSTEM

60% Final written exam

40 % Continuous evaluation. One partial exam will be held.

Attendance to the practical sessions.

% end-of-term-examination:	60
% of continuous assessment (assigments, laboratory, practicals):	40

Review date: 23-05-2022

#### **BASIC BIBLIOGRAPHY**

- Carrasco, J.; Ramos, R. Manual de planificación y gestión de proyectos administrativos, Instituto Nacional de Administración Pública, 1986

## ADDITIONAL BIBLIOGRAPHY

- Heredia, R. Dirección integrada de proyecto -DIP- : Project Management, Escuela Técnica Superior de Ingenieros Industriales, 1999

- Kerzner, H. Project management: a systems approach to planning, scheduling and controlling, John Wiley & Sons, 2006

- Project Management Institute A guide to the project management body of knowledge: PMBOK guide, Project Management Institute, 2008