

28843 - Quality Management and Industrial Safety & Health

Syllabus Information

Academic year: 2024/25

Subject: 28843 - Quality Management and Industrial Safety & Health

Faculty / School: 175 - Escuela Universitaria Politécnica de La Almunia

Degree: 424 - Bachelor's Degree in Mechatronic Engineering

ECTS: 4.0

Year: 4

Semester: Second semester

Subject type: Optional

Module:

1. General information

The general objective of the subject is to provide the knowledge and skills necessary for the planning and management of quality and safety in an industrial environment.

It is therefore necessary to have a prior knowledge of the concept of quality and safety in order to be able to recognize the necessary activities to be carried out in the company before considering the implementation of a management system.

These approaches and goals are aligned with the following Sustainable Development Goals (SDGs) of the 2030 United Nations Agenda (<https://www.un.org/sustainabledevelopment/es/>) in such a way that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to their achievement.

- 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution.
- 8.8 Protect labor rights and promote a safe and secure working environment for all workers, including migrant workers, particularly migrant workers, including migrant workers, in particular migrant women and those in precarious jobs.

2. Learning results

- Defines the concept of quality and its impact on the company.
- It explains in a basic way the documentation of a quality management system.
- Defines the preventive regulations applicable in companies.
- Explain the regulations and the stages of the certification process of a quality system.
- Differentiates and values the different preventive managers.
- Identifies the mandatory preventive documentation in companies.
- Identifies the different basic occupational hazards that can occur in industrial activities.
- Design of appropriate basic preventive measures to eliminate or minimize occupational hazards that may occur.
- It sets out in a basic way the documentation of a safety management system.
- Relates integrating quality, safety and environmental management systems

3. Syllabus

- Part One. Safety and Security Management
 - Basic Security Concepts.
 - LPRL, RD Prevention Services, CAE.
 - Infringements and Penalties.
 - Summary of minimum provisions.
 - Security management. OHSAS 18.001:2007 and ISO 45001:2018.
 - Integrated management systems: quality, safety and environment.
- Second part. Quality and Quality Management
 - Basic concepts.
 - Quality planning.
 - ISO 9001:2015 quality management.
 - Implementation and Certification Process of the company.

4. Academic activities

- Lectures: presentation of the syllabus, duration 35 hours
- Exercises and case studies, duration 10 hours

- Personal study and work: completion of evaluable work and preparation for exams, duration 52 hours
- Assessment tests. 3 hours

5. Assessment system

Continuous Assessment

- Written evaluation test, there will be a theoretical exam that will have a score of 50% of the total evaluation of the subject, being necessary a minimum score of 2 points out of 5 to be able to add the rest of the grades of the subject.
- Exercises, assignments and case studies to be solved individually or in groups. These works will have a score of 30% in the first part and 20% in the second part.

Assessment in Call

- There will be a theoretical-practical exam that will have a score of 100% of the total grade of the subject, being necessary a minimum score of 5 points out of 10. This exam will have questions related to both the theoretical part of the subject and the work done throughout the semester.

6. Sustainable Development Goals

- 4 - Quality Education
- 5 - Gender Equality