

Academic Year/course: 2023/24

# 29994 - Safety and Risk Prevention in Industrial Processes

### **Syllabus Information**

Academic year: 2023/24

Subject: 29994 - Safety and Risk Prevention in Industrial Processes Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

Degree: 558 - Bachelor's Degree in Industrial Design and Product Development Engineering

ECTS: 4.0 Year: 4

Semester: First semester Subject type: Optional

Module:

#### 1. General information

In the future, those who work in engineering and architecture will have in their professional life a direct relationship with workers in their charge. In most cases, they will be responsible for their occupational health and safety. Therefore, this subject seeks to train students in knowledge of a technical nature, related to prevention in the company, such as risk assessment, promotion and planning of prevention, definition of corrective measures and the establishment of control measures.

It aims to enable those who take it to perform the preventive functions of basic level that Art. 35 of the Royal Decree 39/1997 (Prevention Services Regulations) which are required from the personnel in charge of those functions in a work environment.

It also seeks to arouse interest in the subject, so that those who consider it necessary, can broaden their studies in this field by taking the Master's Degree in Occupational Risk Prevention, offered by the University of Zaragoza, which qualifies those who complete it for the performance of **higher level** functions set out in Art. 37 of the aforementioned Royal Decree.

### 2. Learning results

- Acquires the necessary training to perform the functions of the common block of the basic technician level in the field of Occupational Risk Prevention (ORP)
- Is able to interpret documents related to the regulatory framework in ORP.
- Knows and is able to apply risk assessment techniques and take the appropriate precautionary, preventive and protective measures
- Knows how to analyse and prepare the necessary prevention programs for the protection of those involved in industrial processes.

#### 3. Syllabus

- Regulatory framework in preventive matters and its application to industrial facilities.
- · Basic concepts on occupational safety and health.
- · General risks and their prevention.
- · Specific risks in the different activities of the company.
- · Fire prevention systems and self-protection plans.
- · Basic elements of risk prevention management.
- · Basic concepts on first aid in the industry.

## 4. Academic activities

The teaching-learning process requires an approach that allows the learner to assimilate concepts, knowledge and skills sequentially.

Teachers will use whatever combination of the following models they deem appropriate for the acquisition of competencies by the student:

- 1. Theoretical knowledge.
- Practical knowledge.
- 3. Resolution of problems or cases.
- 4. Academic work.

### 5. Assessment system

Class attendance, although not compulsory, is necessary due to the large number of practical cases that will be solved in class with the help of the teachers.

In order to pass the subject, the student must complete and present a series of works and exercises that will help them acquire the necessary "preventive culture" to be able to apply it in their later professional activity.

Those students who, in addition to passing the subject, wish to have access to the accreditation of Basic Technician in ORP will have to carry out an additional work that will have to be developed in a real company.

Following the regulations of the University of Zaragoza in this regard, a global evaluation test will also be scheduled for those students who decide to opt for this second system.