30172 -

Información del Plan Docente

Academic Year	2018/19
Subject	30172 -
Faculty / School	179 - Centro Universitario de la Defensa - Zaragoza
Degree	563 - Bachelor's Degree in Industrial Organisational Engineering
ECTS	4.5
Year	3
Semester	First semester
Subject Type	Compulsory
Module	---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

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

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The learning process designed for the subject combines the following elements:

(i) Theoretical-practical classes that allow to transmit knowledge to the student, encouraging their participation, in which practical cases will be solved and theory will be taught without there being an explicit separation between the two.

(ii) Personalized attention both in small groups and individualized in the tutorials.

Study and continuous personal work by the student since the beginning of the course.

All information and material related to the assignment is available on moodle2.unizar.es

4.2.Learning tasks

The program will be published on the Moodle platform. The credits of the subject are divided into:

- Classes (40 hours)
- Evaluation and intermediate assessments (5 hours)

4.3.Syllabus

TELECOMMUNICATIONS PART

Unit 1. Introduction to telecommunications systems.

Unit 2. Voice signals.

Unit 3. Wired transmission media.

Unit 4. Fiber optics.

Unit 5. Modulation and multiplexing.

Unit 6. Propagation of electromagnetic waves.

Unit 7. Telecommunications networks.

NBQ PART

Unit 1. Nuclear and rediological risk.

Unit 2. Chemical risk.

Unit 3. Biological risk.

Unit 4. Dispersion, detection and protection.

4.4.Course planning and calendar

The session planning and exam dates can be consulted on the official CUD

website: cud.unizar.es.

4.5.Bibliography and recommended resources

- Telecommunications Systems: Handouts and presentations on moodle2.unizar.es
- NBQ Defense: Handouts and presentations on moodle2.unizar.es