Universidad Zaragoza

Academic Year/course: 2024/25

69969 - Optional subject in dual mention 1

Syllabus Information

Academic year: 2024/25
Subject: 69969 - Optional subject in dual mention 1
Faculty / School: 110 - Escuela de Ingeniería y Arquitectura
Degree: 657 - Master in Mechanical Engineering
ECTS: 3.0
Year: 1
Semester: Second semester
Subject type: Optional
Module:

1. General information

To address the wide variety of products and production processes in which a company can collaborate in an Individual Training Plan of the Dual Mention route, compared to the necessarily limited offer of electives from the University, this subject is exceptionally used. Thus, this subject makes the student's curriculum more flexible, taking advantage of the knowledge and resources of companies in very specific technologies and products, which are not in sufficient demand to be incorporated into the offer of electives of the master's degree. In the Individual Training Plan it appears with a specific degree, which will be incorporated into the academic record at the end of the studies.

2. Learning results

The Individual Training Plan specifies the specific Learning Outcomes of the subject that is proposed within the subject "Optional in dual mention". The results of this subject, as they appear in the verification report, are listed below.

1. Recognise and assess specific experimental and simulation techniques and methodologies for the development of products and facilities and their manufacturing planning.
2. Successfully apply experimental, simulation and optimisation techniques and methodologies for the development of products and facilities and the planning of their manufacture.
3. Collect, analyse and interpret information on the state of the art and applicable legislation, as well as propose their own research to design, develop and improve mechanical and manufacturing facilities, components and systems, selecting the most appropriate numerical and experimental techniques.
4. To take on challenges aimed at the development of advanced professional tasks of the mechanical engineer.

3. Syllabus

In each Individual Training Plan, the specific objectives and milestones of the subject whose training is led by the company are specified. There is a tutor in the company, who ensures the learning of technologies and work methodologies and their application to the company's production processes and products, and a tutor from the University, who ensures that the level of learning corresponds to a master's level.

The contents are the technologies and work methodologies in industrial products and processes that are not included in the University's offer and in which the knowledge and experience of the company collaborating in the dual mention is especially relevant.

4. Academic activities

The teaching activities are carried out within the working hours set out in the Individual Training Plan, which will also include hours of stay at the University for follow-up by the tutor and review of theoretical-practical foundations, regulations and the state of the art of the technologies involved in the subject "Elective in dual mention". The activities include seminars in different departments of the company and computer and/or laboratory practices, indicating the company personnel responsible for the delivery of this training.

5. Assessment system

The evaluation is carried out in an analogous way to the evaluations of external internships. The evaluation is carried out by the tutor at the University, in agreement with the tutor in the company, in accordance with the evaluation criteria established in each Individual Training Plan. This assessment is made at

It will be based on a report from the company tutor and a final report prepared by each student that will include: (1) the technical cases developed, (2) aspects related to the review of the theoretical-practical foundations and (3) state of the art of the technologies used.

6. Sustainable Development Goals

9 - Industry, Innovation and Infrastructure
12 - Responsible Production and Consumption