Universidad Zaragoza

29976 - Managing the firm 4.0

Syllabus Information

Academic year: 2023/24
Subject: 29976 - Managing the firm 4.0
Faculty / School: 110 - Escuela de Ingeniería y Arquitectura
Degree: 430 - Bachelor's Degree in Electrical Engineering
    434 - Bachelor's Degree in Mechanical Engineering
    435 - Bachelor's Degree in Chemical Engineering
    436 - Bachelor's Degree in Industrial Engineering Technology
    438 - Bachelor's Degree in Telecommunications Technology and Services Engineering
    439 - Bachelor's Degree in Informatics Engineering
    440 - Bachelor's Degree in Electronic and Automatic Engineering
    470 - Bachelor's Degree in Architecture Studies
    476 -
    558 - Bachelor's Degree in Industrial Design and Product Development Engineering
    581 - Bachelor's Degree in Telecommunications Technology and Services Engineering
ECTS: 4.0
Year: 470 - Bachelor's Degree in Architecture Studies: 5
438 - Bachelor's Degree in Telecommunications Technology and Services Engineering: 4
434 - Bachelor's Degree in Mechanical Engineering: 4
440 - Bachelor's Degree in Electronic and Automatic Engineering: 4
439 - Bachelor's Degree in Informatics Engineering: 4
435 - Bachelor's Degree in Chemical Engineering: 4
430 - Bachelor's Degree in Electrical Engineering: 4
581 - Bachelor's Degree in Telecommunications Technology and Services Engineering: 3
436 - Bachelor's Degree in Industrial Engineering Technology: 4
558 - Bachelor's Degree in Industrial Design and Product Development Engineering: 4
476 - : XX

Semester: First semester
Subject type: Optional
Module:

1. General information

The subject provides an overview of the technological changes that are transforming the value chain of companies, their way of competing and their general context. The student will acquire management tools that will allow them to lead the digital transformation of a company and that include the disciplines of innovation management and change management in the organization.

These approaches and objectives are aligned with some of the Sustainable Development Goals, SDGs, of the Agenda 2030 (https://www.un.org/sustainabledevelopment/es/) and certain specific goals, so that the acquisition of the learning results of the subject provides training and competence to the student to contribute to some extent to their achievement: Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, using resources more efficiently and promoting the adoption of clean and environmentally sound technologies and industrial processes , with all countries taking action in accordance with their respective capabilities.

2. Learning results

Recognizes business opportunities in the new economic and business environment.

Is able to identify digital transformation needs in the company's current business.

Takes advantage of new and open ways to innovate in the company.

Designs strategies for the valorisation of innovation in the face of competition.

Designs strategies for the sustained appropriation of that value.

Identifies the needs for change in the organization and leads such changes.

Designs the organization in coherence with the company's strategy.

3. Syllabus

Topic 1. Introduction to Innovation

Topic 2. Ownership of the value of innovation

Topic 3. Dominant designs and technology standards

Topic 4. Managing digital transformation

Topic 5. The organization of the digital enterprise

Topic 6. Company strategy in the digital economy

4. Academic activities

During the term there will be three hours per week on-site. They will be dedicated to lectures, discussion of cases or readings, or to the preparation of exercises or presentations. They require previous work by the student in the preparation of the materials indicated by the teacher.

Classes and seminars 40h

Student study 40h

Assessment tests 2 h

5. Assessment system

Gradual evaluation: Following the subject is recommended and in this sense a continuous assessment system is offered. The faculty will use the combination of the following models to assess student acquisition of the competencies:

1. Resolution of cases and seminars (60%) The degree of preparation by the student, the quality of their oral presentation and the ability to defend their arguments will be assessed. These cases will be developed preferably with the entire group of students, requiring previous personal work by the student.

2. Exam (40%) The understanding of the contents of the subject and the ability to relate some parts to others will be assessed . It will take place on the date set by the centre.

Global assessment: Students who have not passed the gradual evaluation, must take a final global test consisting of: Delivery of an essay for each of the cases, readings and exercises done during the term. Oral defence of two of the essays of the teacher´s choice. Knowledge test of the subject.