Universidad Zaragoza

Academic Year/course: 2023/24

30132 - Management of Innovation and Technology Policy

Syllabus Information

Academic year: 2023/24
Subject: 30132 - Management of Innovation and Technology Policy
Faculty / School: 175 - Escuela Universitaria Politécnica de La Almunia
Degree: 425 - Bachelor's Degree in Industrial Organisational Engineering
ECTS: 6.0
Year: 4
Semester: First semester
Subject type: Compulsory
Module:

1. General information

Objectives:

- Innovation strategies and technological development in organizations.
- Surveillance and technology foresight systems.
- Innovation results by choosing the appropriate means of industrial property protection.
- Plan research, development and innovation projects related to technological innovation strategies.
- Propose and decide on early cancellations of technological innovation development.
- Technological cooperation agreements with other economic agents.
- Proposals of innovation and technological development activities to national and international R&D&I plans.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (https://www.un.org/sustainabledevelopment/es/), such that the acquisition of the learning resulta of the subject provides training and competence to contribute to some extent to the achievement of target 4.4 of Goal 4, target 8.2 of Goal 8 and target 9.5 of Goal 9.

2. Learning results

1. Design and implement innovation and technological development strategies in organizations.
2. Design and implement technology watch systems to defend against competitors and take advantage of business opportunities in the market. Use patent systems as a means of protecting innovation and as a means of identifying competitive opportunities.
3. Perform technology audits to diagnose the comparative situation of the organization with its competitors.
4. Design and implement effective technology transfer systems to improve organizational competitiveness.
5. Know the factors of success and failure in the development and adoption of product and process innovations in organizations.
6. Know how to evaluate and select the most appropriate R&D&I proposals in accordance with the technological innovation strategy.
7. Manage the development of innovation activities in the organization (new products and processes) identifying the appropriate modes of action for proper planning and management.
8. Know how to plan and decide on early cancellations of technological innovation development.
9. Know the principles of formation and management of multidisciplinary teams of human resources for innovations development.
10. Know the structure of public innovation systems in which organizations will develop the technological innovations.
11. Establishe and manage technological cooperation agreements with other economic agents (companies and research centers).
12. Know and know how to use external funding sources available in public innovation systems for the implementation of innovation activities.
13. Prepare proposals for innovation and technological development activities to the national and international plans of R&D&I.

3. Syllabus

Innovation.

The innovative process.

Business strategy and technology strategy.

Creativity.

Technology watch and business strategy.

Technology forecasting.

Management of R&D&I projects.

Protection of innovation.

Purchase and sale of technology.

Cooperation between companies.

Innovation support policies.

4. Academic activities

1. Generic face-to-face activities:

- Theoretical classes.
- Practical classes.

2. Generic non face-to-face activities:

- Study and assimilation of the theory presented in the lectures.
- Understanding and assimilating problems and case studies solved in practical classes.
- Preparation of seminars, resolution of proposed problems, etc.
- Preparation of the split assessment paper or final exams.

Students who follow the split evaluation, must make partial deliveries of the work they will develop for the subject. The approximate due dates for these partial assignments will be weeks 5, 7, 10, 13 and 15.

5. Assessment system

1. Split assessment system:

- Proposed work (100%): The teacher will propose the completion of a compulsory work in a group of two students as maximum. The approach and correct development, the writing and coherence of the subject matter will be evaluated, as well as the

achievement of results and the final conclusions obtained. In order for this grade to be taken into account, the papersmust be submitted by the due dates.

At least 80% of the face-to-face activities (technical visits, classes, etc.) must be attended.

Prior to the first call, the teacher of the subject will notify each student whether they have passed the subject based on the use of the split assessment system. If the student does not pass in this way, the student will have two additional exams to do so (global assessment test).

2. Global final assessment.

- Written exam (100%): This test will include theoretical and/or practical questions on the different subjects to be evaluated. The test will consist of 5 theory questions. This activity will contribute 100% to the final grade of the subject.