

30132 - Management of Innovation and Technology Policy

Información del Plan Docente

Academic Year	2016/17
Academic center	175 - Escuela Universitaria Politécnica de La Almunia 179 - Centro Universitario de la Defensa - Zaragoza
Degree	425 - Bachelor's Degree in Industrial Organisational Engineering 457 - Bachelor's Degree in Industrial Organisational Engineering
ECTS	6.0
Course	
Period	Half-yearly
Subject Type	Compulsory
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

SPECIALIZATION IN BUSINESS

The learning process designed for this subject is based on the following:

Strong interaction between the teacher/student. This interaction is brought into being through a division of work and

30132 - Management of Innovation and Technology Policy

responsibilities between the students and the teacher. Nevertheless, it must be taken into account that, to a certain degree, students can set their learning pace based on their own needs and availability, following the guidelines set by the teacher.

The current subject Management of innovation and technology policy is conceived as a stand-alone combination of contents, yet organized into three fundamental and complementary forms, which are: the theoretical concepts of each teaching unit and the solving of problems or resolution of questions, at the same time supported by other activities. The organization of teaching will be carried out using the following steps:

– Theory Classes: Theoretical activities carried out mainly through exposition by the teacher, where the theoretical supports of the subject are displayed, highlighting the fundamental, structuring them in topics and or sections, interrelating them.

– Practical Classes: The teacher resolves practical problems or cases for demonstrative purposes. This type of teaching complements the theory shown in the lectures with practical aspects.

– Individual Tutorials: Those carried out giving individual, personalized attention with a teacher from the department. Said tutorials may be in person or online.

DEFENCE

The learning process is based on interactive methodologies and classroom-based classes. Lectures and seminars comprehend the basic knowledge of the course.

In small groups, the students co-operate with their fellow students to accomplish the assessments (essays, case studies, project reports, etc.) proposed by the teacher. They provide an adequate balance between theory and practice to enhance the learning competences.

A specific assessment is the research about a technology with interest for security and defence sector -or a dual-use technology- that they have chosen and confirmed with the teacher not only the viability, but also the size group. Guidance about the overall assessment process will be provided in Moodle.

The independent study is attended by teacher under request.

At the end of the semester, an exam will be required in order to check if the students have gained an understanding of all aspects of the relevant core modules.

5.2.Learning activities

SPECIALIZATION IN BUSINESS

The programme offered to the student to help them achieve their target results is made up of the following activities...

Involves the active participation of the student, in a way that the results achieved in the learning process are developed, not taking away from those already set out, the activities are the following:

– **Face-to-face generic activities:**

– **Theory Classes:** The theoretical concepts of the subject are explained and illustrative examples are developed as support to the theory when necessary.

– **Practical Classes:** Problems and practical cases are carried out, complementary to the theoretical concepts studied.

30132 - Management of Innovation and Technology Policy

— Generic non-class activities:

● Study and understanding of the theory taught in the lectures.

● Understanding and assimilation of the problems and practical cases solved in the practical classes.

● Preparation of seminars, solutions to proposed problems, etc.

● Preparation of summaries and reports.

● Preparation of the written tests for continuous assessment and final exams.

The subject has 6 ECTS credits, which represents 150 hours of student work in the subject during the trimester, in other words, 10 hours per week for 15 weeks of class.

DEFENCE

- Lectures
- Seminars
- Teamwork in essays, case studies, project reports and technology analysis
- Independent study
- Written exam

5.3.Program

SPECIALIZATION IN BUSINESS

Innovation

The innovative process

Company strategy and technology strategy

Creativity

Technological surveillance

Technology foresight

The management of research, development and innovation projects

Protection of innovation

The buying and selling of technology

Cooperation between businesses

Innovation support policies

30132 - Management of Innovation and Technology Policy

DEFENSE

Part 1:

1. Introduction to innovation
2. Firm's innovation strategy
3. Management teams for innovation development

Part 2:

1. Foresight and technological prospective
2. Technology audit
3. Appropriating Innovation - Managing Industrial property
4. Research and Development Project Management

Part 3:

1. Technology transfer and cooperation
2. Innovation systems

5.4.Planning and scheduling

SPECIALIZATION IN BUSINESS

Class hall sessions & work presentations timetable

The dates of the final exams will be those that are officially published at <http://www.eupla.es/secretaria/academica/examenes.html>.

The written assessment tests will be related to the following topics:

— Test 1: Topics 1, 2 & 3.

— Test 2: Topics 4, 5, 6 & 7.

— Test 3: Topics 8, 9, 10 & 11.

DEFENSE

Moodle is an e-learning facility that allows for the uploading of documents and notices about the planning and scheduling.

The lectures, seminars and cases will be announced in advance during class.

The official web site announces the written exam dates.

5.5.Bibliography and recommended resources

- Escorsa Castells, Pere. Tecnología e innovación en la empresa / Pere Escorsa Castells, Jaume Valls Pasola . - 1ª ed., 1ª reimpr. Barcelona : Edicions UPC, 2004
- Barba Ibáñez, Enric. Cómo gestionar la innovación / Enric Barba, José Ramón Magarzo. 1ª edición Lleida: Doblerre,

30132 - Management of Innovation and Technology Policy

2013.

- Hidalgo Nuchera, Antonio. La gestión de la innovación y la tecnología en las organizaciones / Antonio Hidalgo Nuchera, Gonzalo León Serrano, Julián Pavón Morote Madrid : Pirámide, 2002
- Tidd, Joe y Bessant, John. Managing innovation. Integrating Technological, Market and Organizational Change. Wiley, 2009
- Hill, Charles W. y Jones, Gareth R. Administración estratégica. Un enfoque integrado. México: McGrawHill, 2004
- Harris, Tom. Collaborative Research and Development Projects. A practical guide. Springer, 2007
- Gestión económica de la I+D empresarial y de la innovación. COTEC, 2011 [Disponible en la página web de la fundación COTEC, previo registro]
- PMBOK ®, Project Management Institute. 2012.
- Innovación en Defensa y Seguridad. COTEC, 2011 [Disponible en la página web de la fundación COTEC, previo registro]
- Estrategia de Tecnología e Innovación para la Defensa, ETID, Madrid. Disponible en la página web del Ministerio. Madrid: Ministerio de Defensa, 2010
- Martínez-González, A. Un análisis económico de la producción y contratación de los sistemas de defensa. Madrid: Instituto Universitario General Gutiérrez Mellado, UNED, 2013
- F. Cauzic, H. Colas, N. Leridon, S. Lourimi, and E. Waelbroeck-Rocha. A comprehensive analysis of emerging competences and skill needs for optimal preparation and management of change in the EU defence industry. . 2009
- Rohrbeck, René. Corporate Foresight. Berlin, Heidelberg: Springer-Verlag, 2011
- A comprehensive analysis of emerging competences and skill needs for optimal preparation and management of change in the EU defence industry / F. Cauzic... et al. 2009
- Riola Rodríguez, J. M. ¿El I+D+i y el Observatorio Tecnológico de Defensa?. Arbor : ciencia, pensamiento y cultura. Madrid : Consejo Superior de Investigaciones Científicas, 2014, vol. 190, no. 765. [Publicación periódica]
- Riola Rodríguez, J. M. ¿La política de I+D en Defensa: Metas y retos tecnológicos? En: Las Tecnologías de Doble Uso: La Investigación y el desarrollo al Servicio de la Sociedad Civil y Militar. I Jornadas, 2011, pp. 13?22.
- Rohrbeck, René. Corporate Foresight. Contributions to Management Science. Berlin: Physica-Verlag, 2010
- Andersen, P. D. y Rasmussen, B. Fremnsyn: Metoder, praksis og erfaringer. København: Styrelsen for Forskning og Innovation, 2012
- Schilling, Melissa. Strategic Management of Technological Innovation. McGraw Hill, 2006
- Fonfría Mesa A., Pérez-Forniés, C. (Directores). Lecciones de economía e industria de la defensa. Madrid: Aranzadi, Thomson Reuters 2013

Resources

Materials

SPECIALIZATION IN BUSINESS

Material	Format
Topic theory notes Topic problems	Paper/repository
Topic theory notes	
Topic presentations Topic problems	Digital/Moodle E-Mail

30132 - Management of Innovation and Technology Policy

Related links	
---------------	--