

Academic Year: (2023 / 2024)

Review date: 28-04-2023

Department assigned to the subject: Mechanical Engineering Department

Coordinating teacher: REVILLA TORREJON, ANTONIO JAVIER

Type: Compulsory ECTS Credits : 3.0

Year : 1 Semester : 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

No prerequisites

OBJECTIVES

a) Knowledge and contents:

Knowledge of innovation key success factors.

Knowledge of intellectual property law and its implications for industrial design

b) Skills

Ability to apply innovation management tools, and to evaluate decisions on intellectual and industrial property protection.

Ability to identify problems and needs in the business environment and address them by means of innovative products and process improvements.

c) Competences:

Discover and lead innovations related to industrial design.

Judgement to address the requirements of innovative business ideas.

DESCRIPTION OF CONTENTS: PROGRAMME

Part 1:

1. Concepts, sources, and types of innovation

2. Adoption and diffusion of innovations

3. Technological innovation and its types

4. New product development

5. Technological co-operation

6. Open innovation and its characteristics

7. Financing innovation

Part 2:

8. Protecting innovation

9. Key intellectual and industrial property concepts

10. Exploitation of new technologies

LEARNING ACTIVITIES AND METHODOLOGY

Teaching methods:

TM1 - Lectures with the support of computer-based and audiovisual media: development of key concepts and reference to bibliographical materials.

TM2 - Critical readings of key texts: press articles, reports, textbooks and/or academic papers, either for in-class discussion or out-of-class revision of the module contents.

TM3 - Case studies, exercises, etc., which will be solved either individually or in teams

TM4 - Presentation and in-class discussion of relevant topics or case studies.

TM5 - Individual and/or team essays and reports

Formative activities:

FA1 - Theoretical lecture

FA2 - Practical seminar

FA3 - Individual student work

FA4 - Tutorials

FA5 - Exams

ASSESSMENT SYSTEM

First attempt:

End-of-term written exam: 50%

Continuous assessment (case studies and team project): 50%

Resit: The final grade is the maximum of the following grades:

a) A weighted average calculated as in the first attempt: 50% final exam, 50% continuous assessment

b) Resit exam.

% end-of-term-examination: 50

% of continuous assessment (assignments, laboratory, practicals...): 50

BASIC BIBLIOGRAPHY

- Baker, D., Jayadev, A., & Stiglitz, J. E. Innovation, intellectual property, and development: A better set of approaches for the 21st century., ccc, 2017
- Baker, D., Jayadev, A., & Stiglitz, J. E. Innovation, intellectual property, and development: A better set of approaches for the 21st century., AccessIBSA , 2017
- Schilling, M.A. Strategic Management of Technological Innovation, McGraw-Hill, 2013

ADDITIONAL BIBLIOGRAPHY

- Dodgson, M, Philips, N., y Gann, D. M. (Eds) The Oxford Handbook of Innovation Management, Oxford University Press, 2014
- Castle, D. The Role of Intellectual Property Rights in Biotechnology Innovation, Edward Elgar Publishing, 2009
- Chesbrough, H. Open Innovation: The New Imperative for Creating and Profiting from Technology., Harvard University Press, 2003
- Westland, J.C. Global Innovation Management, Palgrave, 2016
- Westland, J.C. Global Innovation Management, Palgrave, 2016