uc3m Universidad Carlos III de Madrid

Technology-based firms management

Academic Year: (2020 / 2021) Review date: 13/07/2020 11:28:48

Department assigned to the subject:

Coordinating teacher: MORCILLO BELLIDO, JESUS

Type: Compulsory ECTS Credits: 3.0

Year: 1 Semester: 1

OBJECTIVES

Specific competences:

- 1. Competence for general and technical management and management of R&D&I projects in technological companies and organizations, within the scope of Computer Engineering
- 2. Capability for elaboration, strategic planning, management, coordination and technical and economic management of projects within the scope of Computer Engineering, in accordance to quality and environmental criteria.
- 3. Capability to apply enonomic, Human Resource Management and Project Management principles, as well as the legal framework, regulation and normalization of Computer Engineering.

Learning results:

- o Be able to manage technological companies and organizations, within the scope of Computer Engineering.
- o Be able to carry out project economic management and Human Resource Management, within the scope of Computer Engineering.

DESCRIPTION OF CONTENTS: PROGRAMME

- 1. The Information Technology (IT) sector.
- 2. The firm: general concepts and classifications.
- 2.1. General Management.
- 2.2. Main functional áreas: Finance, Marketing, HHRR, Operations.
- 2.3. Strategy. Mission, vision and competitive advantage
- 2.4. Corporate strategy. Business unit and functional strategy
- 3. Economic foundations of management.
- 4. The Finance function.
- 4.1 Investments and project selection criteria.
- 4.2 Accounting.
- 3.3 Financing and financial analysis.
- 4. Strategy.
- 4.1. Strategy definition. Mission, vission, competitive advantage.
- 4.2. Corporate, business unit and functional strategies.
- 5. IT project economic management. Earned Value Management.
- 6. Specific management challenges in the IT sector.

LEARNING ACTIVITIES AND METHODOLOGY

Lectures.

- o Lectures by professor with TIC/audiovisual support, on the main concepts. Complementary bibliography is provided.
- o Resolution of practical cases, problems, etc. presented by the instructor, either individually or in groups
- o Instructor-moderated presentation and discussion of topics related to the subject and practical cases

Individual study

Critical reading of instructor-recommended texts: Press articles, reports, books and/or academic papers, either for class discussion or for complementing the knowledge on the subject

Group work

Preparation of assignments and reports, either individually or in groups

Partial and final exams

ASSESSMENT SYSTEM

% end-of-term-examination/test: 60 % of continuous assessment (assignments, laboratory, practicals...): 40

- Assignments
- Exam

The evaluation system has a double aim: determine the degree to which learning objectives have been met, and promote an effective and efficient learning process. It will encompass a final examination accounting for 60% of the final grade. It will also encompass a continuous evaluation based on assignments/cases and quizzes, that will account for the remaining 40%. Minimum grade required in the final examination: 4

In the extraordinary (make-up) evaluation, continuous evaluation grade will only be taken into account if this leads to a higher grade.

BASIC BIBLIOGRAPHY

- Material created by instructor Slides, exercises, ..., Through Aula Global LMS.
- Richard A. Brealey, Stewart C. Myers, Alan J. Marcus Fundamentos de Finanzas Corporativas, McGraw-Hill.

ADDITIONAL BIBLIOGRAPHY

- Veciana, José María La creación de empresas : un enfoque gerencial, La Caixa.