

Academic Year: (2023 / 2024)

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Department assigned to the subject: Mechanical Engineering Department

Coordinating teacher: USERO SANCHEZ, MARIA BELEN

Type: Basic Core ECTS Credits : 6.0

Year : 4 Semester : 2

Branch of knowledge: Engineering and Architecture

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

No pre-requirements.

OBJECTIVES

The main objectives for this course are to familiarize future engineers with the concept of private companies and their institutional and legal framework, as well as with the essentials of business management. In addition, it will convey the relevant role of engineering and engineers in business management.

Specific Capabilities:

- Understand the concept of a company as a system, its various constituent subsystems and their interrelationships.
- Initial understanding of the company's institutional and legal framework.
- Identify the main business processes, and the need for their cross-functional integration.
- Position engineering within the overall business activities, and understand the engineer's role in the management of the companies.

Generic Capabilities:

- Analysis of unstructured situations and decisions, with incomplete and not fully reliable information and multiple, conflicting objectives.
- Development of capabilities related to qualitative and quantitative analysis. Written expression of this qualitative and quantitative reasoning.
- Ability to communicate with non-technical executives, applying the appropriate vocabulary and structuring tools.

DESCRIPTION OF CONTENTS: PROGRAMME

This is an introductory course with the aim of providing the student with the basic concepts of business management. It provides an overview of the historical context of modern business and of the major functional areas of management studies such as management, finance, production and marketing. Also, the course includes very important topics like the nature of the company, its environment and the tools for the decision making process.

1. Introduction
 - 1.1. Concept and nature of the firm
 - 1.2. Business processes and business functions
 - 1.3. Role of engineering and engineers in Business Administration.
2. Firms: Types and objectives
 - 2.1. Enterprise and entrepreneur
 - 2.2. Objectives and strategies
 - 2.3. The business environment
3. Financial management

- 3.1. Accounting. Analysis of financial statements
- 3.2. Investment decisions
- 3.3. Financing decisions

- 4. Operations management
 - 4.1. Productive Systems
 - 4.2. Project management
 - 4.3. Logistics

- 5. Marketing and sales management
 - 5.1. Marketing fundamentals.
 - 5.2. The marketing mix.
 - 5.3. The marketing plan.

- 6. The management function.
 - 6.1 Directive function
 - 6.2. Organizational structure.
 - 6.3. Human resource management

- 7. Entrepreneurship and innovation: Technology-based companies

LEARNING ACTIVITIES AND METHODOLOGY

Lectures, exercises, business plan, cases and assignments to be carried out by the students and discussed during the sessions, readings assigned by the instructor or identified by the students.

ASSESSMENT SYSTEM

% end-of-term-examination/test:	60
% of continuous assessment (assignments, laboratory, practicals...):	40
- Continuous evaluation (40%).	
- Final exam (60%).	
It is compulsory to achieve minimum 4 points over 10.	

BASIC BIBLIOGRAPHY

- B Erasmus, S Rudansky-Kloppers, J Strydom, JA Badenhorst-Weiss, y otros (eds.). Introduction to Business Management, Oxford University Press, 2019

ADDITIONAL BIBLIOGRAPHY

- Schilling, M. Strategic Management of Technological Innovation, McGraw Hill, 2017

- Sánchez Gómez, R. y González Benito, J. Administración de Empresas: objetivos y decisiones, MCGraw Hill, 2012