

Course guide

340028 - EMPR-N - Business

Last modified: 10/07/2026

Unit in charge: Vilanova i la Geltrú School of Engineering
Teaching unit: 732 - OE - Department of Management.

Degree: BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (Syllabus 2009). (Compulsory subject).
BACHELOR'S DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING (Syllabus 2009). (Compulsory subject).
BACHELOR'S DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATIC CONTROL ENGINEERING (Syllabus 2009). (Compulsory subject).
BACHELOR'S DEGREE IN MECHANICAL ENGINEERING (Syllabus 2009). (Compulsory subject).
BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING AND RAILWAY SYSTEMS (Syllabus 2024). (Compulsory subject).

Academic year: 2026 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: MARTA DIAZ BOLADERAS

Others: MARTA DIAZ BOLADERAS
ARIADNA MARIA LLORENS GARCÍA
ANNA MARIA MIR SERRA
NATHALIE SEGURA CASTRO

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

2. CE6. Adequate knowledge of the concept of business, institutional and legal framework of a company. Organization and Management.

Transversal:

1. TEAMWORK - Level 2. Contributing to the consolidation of a team by planning targets and working efficiently to favor communication, task assignment and cohesion.
3. ENTREPRENEURSHIP AND INNOVATION - Level 2. Taking initiatives that give rise to opportunities and to new products and solutions, doing so with a vision of process implementation and market understanding, and involving others in projects that have to be carried out.
5. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 2. Using strategies for preparing and giving oral presentations. Writing texts and documents whose content is coherent, well structured and free of spelling and grammatical errors.
7. SELF-DIRECTED LEARNING - Level 2: Completing set tasks based on the guidelines set by lecturers. Devoting the time needed to complete each task, including personal contributions and expanding on the recommended information sources.
4. EFFECTIVE USE OF INFORMATION RESOURCES - Level 1. Identifying information needs. Using collections, premises and services that are available for designing and executing simple searches that are suited to the topic.

TEACHING METHODOLOGY

LECTURES SYNTHESIS

In the face-to-face sessions, the teacher will provide a summary of the topic. This presentation is intended as a guide for the students' work and study, with the function of presenting the topic, proposing material for their study, clarifying doubts and providing a summary.

Each topic will provide:

- Material in PowerPoint format used in class presentations and other complementary material that will be available on the Digital Campus.
- Specific bibliography with indication of location, preferring material in electronic format.

Efforts will be made to ensure that the concepts have a direct connection with the activities that will be worked on during the course.

IN-PRESENTIAL WORK ACTIVITIES

- Problems and exercises to consolidate the concepts introduced in the presentation.
- Approaching situations that allow the group to accumulate a shared experience that serves to advance the understanding of the contents (for example group dynamics; effective communication experiences). They are based on experiencing various situations in which the own experience serves as study material.
- Case and article work Case or article work will be based on the questions proposed by the teacher. These works must be submitted on the day agreed upon at the beginning of the session where they will be discussed in the class group. The maximum deadline for submitting a case is established in the calendar. The teacher can upload to the Digital Campus, as a reference and supplementary guide, some of the best evaluated works from each submission.

Case work aims to foster the following capabilities:

- Understanding of the situation presented and ability to synthesize its most relevant aspects.
- Application of the concepts studied to practical cases.
- Understanding the complexity of real situations, the different points of view and the various dimensions of organizational and management phenomena.
- Presentation of written documents.
- Skills to exchange points of view and discuss, and the ability to learn from the debate.
- Face-to-face work activities may be assessable. In this case, the day on which they will be carried out will be indicated at the beginning of the course.

PRACTICES

The assignments will be carried out in groups of a maximum of 5 members, which will be formed at the beginning of the course and will be maintained.

Throughout the course, 2 or more practicals will be carried out where problems will be posed to be solved, in which it will be necessary to apply the knowledge that is being acquired. These practicals act as the backbone of the learning, following the principles of project-based learning.

For each practice, a dossier will be provided containing the objectives, description, delivery date and assessment criteria.

The practices will be presented in class by the students. The evaluation of the oral presentation is individual and forms part of the grade, as specified in the Grading System section. Each student will make at least one oral presentation of one of the practices carried out. The days of the presentation will be announced at the beginning of the course.

SMALL GROUP AND INDIVIDUALIZED TUTORING

The teacher will follow, individually and in small groups, the student's progress and tutor their practices, providing feedback on their progress and the degree of achievement of the objectives of their work, while giving indications for their improvement.

LEARNING OBJECTIVES OF THE SUBJECT

1. Analyse, interpret and explain basic economic phenomena (microeconomics and macroeconomics) and its influence on business decisions.
2. Relate information to make decisions, not very complex, in the economical area of a company.
3. Solve situations related to human resources management of an organization.
4. Taking initiatives, related to entrepreneurship and innovation, that creates market opportunities.

STUDY LOAD

Type	Hours	Percentage
Self study	90,0	60.00
Hours small group	30,0	20.00
Hours large group	30,0	20.00

Total learning time: 150 h

CONTENTS

- Module 1 company in the economic environment

Description:

Provide an overview of the macroeconomic environment, the relationship between the variables and the framework within which managers make decisions.

Contents

- 1.1. Operators. The company in the economic system
- 1.2. Linkages with the macroeconomic environment
- 1.3. The company as a system
- 1.4. Functions and areas of the company decision making
- 1.5. Types and determinants of organization structure

Specific objectives:

Understanding the interrelationship of the factors that affect macroeconomic dynamics and how this dynamic influence business decisions and results.

Related activities:

- Analyze a newspaper article on the adjustment measures of the government to reduce fiscal deficits, identifying its impact on various economic operators. The main purpose is to evaluate the different opinions, differentiating technical-economic issues from values-political, and be able to express grounded personal opinions.
- Analyze a real business plan as a synthesis of business decisions based on opportunity business. Understanding the interrelationship of business decisions in each area.

Full-or-part-time: 18h

Theory classes: 4h

Self study : 14h

- Module 2 Managing People

Description:

LEADERSHIP AND MOTIVATION OF TEAMS

- 2.1. Motivation
- 2.2. Communication
- 2.3. Teams
- 2.4. Leadership and emotional intelligence

HUMAN RESOURCE MANAGEMENT

- 2.5. Human Resources Planning
- 2.6. Promotion and recruitment
- 2.7. Development techniques: training and motivating
- 2.8. The evaluation of individual and team performance

Specific objectives:

Understanding the basics of human behaviour in organizations, from the scope of managerial skills and human resource management.

Related activities:

- Work individually and perform critical work on a case of company reorganization resulting in a conflict. Discussion group.
- Conduct a role playing on a mediation session in the company in class.
- Working individually and make a critical work on a case of recruitment, leadership and communication the company. Discussion group.
- Working individually and make a critical work on the film "El método"

Full-or-part-time: 32h

Theory classes: 8h

Laboratory classes: 6h

Self study : 18h

- Module Finance function

Description:

- 3.1. The economic and financial structure of the company. Ratings.
- 3.2. Costs, benefits and results.
- 3.3. Evaluation and selection of investments.
- 3.4. The sources of funding.

Related activities:

Exercise 1: BSI order

Exercise 2: analyzing a company's balanced

Exercise 3: analyzing a company undercapitalized

Exercise 4: analyze and compare two real balances

Exercise 5: Arrange items in the profit and loss account

Exercise 6: analyze the income statement of a company and propose solutions

Exercise 7: Choosing between two projects through the application of NPV and IRR

Practice on real data of a company.

Full-or-part-time: 39h

Theory classes: 10h

Laboratory classes: 8h

Self study : 21h

- Module 4 Introduction to marketing and sales

Description:

Offer a perspective of market orientation and customer, identifying major problems, and learn basic technical and market knowledge for making business decisions.

Contents

- 4.1. Market orientation and customer orientation of competitive businesses.
- 4.2. Market knowledge. Consumer behavior and marketing research.
- 4.3. Operational marketing. Marketing decisions throughout the company.
- 4.4. The product: the quality from a business perspective. Differentiation and identification.
- 4.5. Price: internal and external constraints. Pricing systems.
- 4.6. The promotion and advertising: commercial communications, imaging.
- 4.7. The commercial distribution, channel selection and distribution strategies.

Specific objectives:

Offer a perspective of market orientation and customer, identifying the main problems, and learn basic technical and market knowledge for making business decisions.

Related activities:**Exercises**

- Exercise 1: Market research
- Exercise 2: SWOT
- Exercise 3: Marketing MIX

Practice: you will receive the statement of a case and all necessary data with which the students developed the marketing mix.

Full-or-part-time: 39h

Theory classes: 10h

Laboratory classes: 8h

Self study : 21h

GRADING SYSTEM

The assessment for this course includes various activities. Specifically, the grade will be distributed as follows:

1) Written Exams (60%) Two exams will be conducted to assess the achievement of the course content. These may include multiple-choice or short-answer questions, open-ended/development questions, and/or practical exercises. First Exam: This will take place on the scheduled date during the mid-term assessment period and will cover the modules The Company in the Economic Environment and Financial Management. Second Exam: This will take place on the scheduled date during the final assessment period and will cover the modules Marketing and People Management. Each exam accounts for 30% of the final course grade. 2)

Practical Assignments (40%) Two practical assignments will be completed during the course. These assignments will be done in teams and tutored in class. The assessment will take into account: The quality of the report submitted in the specified format (20%). The oral presentation in class and the Q&A session during the presentation (20%). Each practical assignment accounts for 20% of the final course grade.

Final Grade Calculation The final grade (FG) will be calculated using the following formula:

$$FG = \{ \text{Written Exams} \} (60\%) + \{ \text{Practical Assignments} \} (40\%)$$

Re-assessment Students eligible for a re-assessment, according to academic regulations, will be able to take a new written exam. This exam will allow them to improve exclusively the component corresponding to Written Exams (60%).

BIBLIOGRAPHY

Basic:

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