

Course guide

205264 - EE - Economics and Business

Last modified: 11/04/2025

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 732 - OE - Department of Management.

Degree: BACHELOR'S DEGREE IN INDUSTRIAL TECHNOLOGY ENGINEERING (Syllabus 2010). (Compulsory subject).

Academic year: 2025 **ECTS Credits:** 6.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: JOSE SIMÓ GUZMAN

Others:

Segon quadrimestre:

JOSE SIMÓ GUZMAN - Grup: 11, Grup: 12, Grup: 21, Grup: 22, Grup: 31, Grup: 32, Grup: 33, Grup: 34

IRENE TRULLAS CASASAYAS - Grup: 11, Grup: 12, Grup: 21, Grup: 22, Grup: 31, Grup: 32, Grup: 33, Grup: 34

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

CE06-INDUS. Adequate knowledge of the concept of a company, institutional and legal framework of the company. Organization and management of companies. (Basic training module)

Transversal:

CT01 N1. Entrepreneurship and innovation - Level 1. Showing enterprise, acquiring basic knowledge about organizations and becoming familiar with the tools and techniques for generating ideas and managing organizations that make it possible to solve known problems and create opportunities.

TEACHING METHODOLOGY

The course is divided into three parts:

- * Theory classes
- * Practical classes
- * Self-study for doing exercises and activities.

In theory classes, teachers will introduce the theoretical basis of the concepts, methods and results illustrating them with examples appropriate to facilitate their understanding.

In practical classes (at the classroom), teachers guide students in applying theoretical concepts to solve problems, always basing critical reasoning. We propose that students solve exercises in and outside the classroom, to promote contact and use the basic tools needed to solve problems.

Students, independently, need work on material provided by teachers and the outcomes of the sessions of exercises and problems, in order to fix and assimilate the concepts. Teachers provide a curriculum and monitoring of activities (by ATENEA).

LEARNING OBJECTIVES OF THE SUBJECT

The course Economics and business introduces the concepts, principles and basics of economics and management and organization of enterprises. The course covers two of the three main functions of a company: marketing and finance. The third function is covered in the subject: Operations Management.

STUDY LOAD

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

Total learning time: 150 h

CONTENTS

Economy

Description:

- 1.1. Introduction: Principles of Economics
- 1.2. Micro-economics
- 1.3. Macro-economics

Related activities:

- Activity 1: Theory/Large groups sessions
- Activity 2: Exercises/Medium groups sessions
- Activity 3: Mid-Semester Exam
- Activity 4: Final Exam

Full-or-part-time: 22h

- Theory classes: 6h
- Practical classes: 6h
- Self study : 10h

Concepts of Business

Description:

- 2. 1. Concept of companies
- 2. 2. Types of companies
- 2. 3. Business plan
- 2.4. The areas of the company

Related activities:

- Activity 1: Theory/Large groups sessions
- Activity 2: Exercises/Medium groups sessions
- Activity 3: Mid-Semester Exam
- Activity 5: Case Study

Full-or-part-time: 10h

- Theory classes: 3h
- Practical classes: 2h
- Self study : 5h

Marketing Management

Description:

- 3.1. Analytical Marketing
- 3.2. Strategic Marketing
- 3.3. Operational Marketing
- 3.4. The Marketing plan

Related activities:

- Activity 1: Theory/Large groups sessions
- Activity 2: Exercises/Medium groups sessions
- Activity 5: Case Study

Full-or-part-time: 59h

Theory classes: 11h 30m

Practical classes: 10h

Self study : 37h 30m

Financial Management

Description:

- 4.1. Financial statements
- 4.2. Budget management
- 4.3. Economic and financial analysis
- 4.4. Break Even Point

Related activities:

- Activity 1: Theory/Large groups sessions
- Activity 2: Exercises/Medium groups sessions
- Activity 3: Mid-Semester Exam
- Activity 4: Final Exam

Full-or-part-time: 59h

Theory classes: 11h 30m

Practical classes: 10h

Self study : 37h 30m

ACTIVITIES

ACTIVITY 1: THEORY/LARGE GROUPS SESSIONS

Description:

Preparation before and after the theory sessions and attendance

Specific objectives:

Transfer the necessary knowledge for a correct interpretation of the contents in the large group sessions, resolving doubts about the content of the course and generic skills development.

Material:

Notes posted to the Atenea platform.

General literature of the course.

Delivery:

During some sessions, exercises will be conducted in the class, individually or in small groups.

Full-or-part-time: 44h

Self study: 16h

Theory classes: 28h

ACTIVITY 2: EXERCISES/MEDIUM GROUPS SESSIONS

Description:

Preparation before and after the practical classe and attendance to these classes

Specific objectives:

Acquire the necessary skills for a correct interpretation of the problems of the course, and their satisfactory resolution.

Preparation for the practical part of exams of the course. Development of generic skills.

Material:

Notes posted to the Atenea platform.

General literature of the course.

Exercises on the Atenea platform.

Problem portfolio for the course.

Delivery:

During these sessions, exercises will be conducted in class or virtually, individually or in small groups.

It represents 20% of the final course grade

Full-or-part-time: 42h

Self study: 14h

Practical classes: 28h

ACTIVITY 3: MID-SEMESTER EXAM

Description:

Individual and writing assessment about the contents of module 1, 2 and 4.

Specific objectives:

The exam must demonstrate that the student has acquired and assimilated the concepts, principles and fundamentals related to module 1, 2 and 4.

Material:

Instructions and terms for the mid-semester exam

Delivery:

The hand-in will be the result of the exam.
It represents 25% of the final course grade.

Full-or-part-time: 16h

Self study: 14h

Theory classes: 2h

ACTIVITY 4: FINAL EXAM

Description:

Individual and writing assessment about the contents of module 1, 2 and 4.

Specific objectives:

The exam must demonstrate that the student has acquired and assimilated the concepts, principles and fundamentals related to module 1, 2 and 4.

Material:

Instructions and terms for the final exam

Delivery:

The hand-in will be the result of the exam.
It represents 25% of the final course grade.

Full-or-part-time: 16h

Self study: 14h

Theory classes: 2h

ACTIVITY 5: CASE STUDY

Description:

Groups of 4 students where they will apply the principles introduced in units 1, 2, and 3 to the industrial or commercial sector

Specific objectives:

Summary exercise of all modules of the course to determine the acquisition and assimilation of all the concepts and techniques discussed in the course.

Material:

Formulation of the exercise (ATENEA).

Materials of the course.

Official websites (Internet).

Recommended textbooks.

Delivery:

The report of the activity is delivered in digital format.

The delivery date is one week before the last class.

This activity represents 30% of the final grade for the course.

Full-or-part-time: 32h

Self study: 32h

GRADING SYSTEM

The final grade depends on the following assessment criteria:

- Activity 2 exercises, weight: 20%
- Activity 3 mid-semester exam, weight: 25%
- Activity 4 final exam, weight: 25%
- Activity 5 case study, weight: 30 %

The unsatisfactory results of the mid-semester exam (activity 3) can redirect using a written test to be held the same day fixed for the final exam (activity 4). This test, with score between 0 and 10, can be accessed by all students enrolled. The grade obtained by the application of the renewal will replace the initial grade, as long as it is higher.

EXAMINATION RULES.

Activities 2 and 5 will be undertaken individually and/or in groups and written.

Activities 3 and 4 will be undertaken individually and written.

BIBLIOGRAPHY

Basic:

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- Samuelson, Paul A. Economía. 18a ed. Madrid: McGraw-Hill, 2006. ISBN 8448151542.
- Mochón Morcillo, Francisco. Principios de economía [on line]. 4a ed. Madrid: McGraw-Hill, 2010 [Consultation: 26/09/2022]. Available on : https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=8697. ISBN 9788448172060.
- López-Pinto Ruiz, B. Los pilares del marketing [on line]. Barcelona: Edicions UPC, 2008 [Consultation: 20/09/2022]. Available on: <http://hdl.handle.net/2099.3/36833>. ISBN 9788483019498.
- Gonzalez Dominguez, F. J. Principios y fundamentos de gestión de empresas. 2a ed. Madrid: Pirámide, 2008. ISBN 9788436821871.
- Jiménez, J.L.; Pérez, C.; Torre, A. Dirección financiera de la empresa: teoría y práctica. 2a ed. Madrid: Pirámide, 2009. ISBN 9788436822984.
- Kotler, Philip [et al.]. Dirección de marketing [on line]. 15a ed. México: Pearson Educación, 2016 [Consultation: 15/06/2022]. Available on : https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=6495. ISBN 9786073237000.
- Rajadell Carreras, Manel. Creación de empresas [on line]. 3ª ed. Barcelona: UPC, 2009 [Consultation: 23/04/2024]. Available on: <http://hdl.handle.net/2099.3/36602>. ISBN 9788498803747.

Complementary:

- "Real Decreto 1515/2007; Plan General de Contabilidad de Pequeñas y Medianas Empresas. B.O.E. 21-11-07". Boletín Oficial del Estado.

RESOURCES

Other resources:

- Problem portfolio for the course.
- Transparencies of every module