

## Course guide

### 220556 - 220556 - Financial Management

**Last modified:** 11/04/2025

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

**Degree:** MASTER'S DEGREE IN MANAGEMENT ENGINEERING (Syllabus 2012). (Compulsory subject).

**Academic year:** 2025    **ECTS Credits:** 5.0    **Languages:** Catalan, Spanish

#### LECTURER

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**Coordinating lecturer:** MERCEDES GARCIA PARRA

**Others:** CARLOS SICILIA ESPÍN

#### DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

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##### Specific:

1. Apply concepts and techniques of descriptive and statistical inference under uncertainty.
2. Apply theories and inherent principles in the general direction of an organization with the aim of analyzing uncertainty complex situations and make decisions using engineering tools.
3. Apply theories and inherent principles in the financial area in order to analyze uncertainty complex situations and make decisions using engineering tools.
4. Develop a business plan in a new context.

##### Generical:

5. Ability to apply knowledge to solve problems in new environments or unfamiliar environments within broader contexts (or multidisciplinary) related to engineering.
6. Self-learning capacity to independent continuous training.
7. Ability to effectively communicate their findings, knowledge and concluding reasons to skilled and unskilled audiences, clearly and unambiguously.
8. Ability to integrate knowledge and formulate judgments with the aim of making decisions based on information that, with incomplete or limited include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments.
9. Ability to understand the impact of engineering solutions in a global and social context .
10. Ability to operate and lead multidisciplinary and multicultural groups, with negotiation skills, group work, relationships in an international setting, and conflict resolution.

## TEACHING METHODOLOGY

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The course is divided into three parts:

Theory classes

Practical classes

Self-study for doing exercises and activities

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

In the practical classes (in the classroom), teachers guide students in applying theoretical concepts to solve problems, always using 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 to work on the materials provided by teachers and the outcomes of the sessions of exercises/problems, in order to fix and assimilate the concepts. The teachers provide the curriculum and monitoring of activities (by ATENEA).

## LEARNING OBJECTIVES OF THE SUBJECT

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The financial management course introduces the students to the most significant aspects of the company's financial area, through the knowledge of basic concepts and the budgetary and financial accounting techniques. The objective is to analyze the accounting information to make decisions and to undertake new investment and financial projects.

## STUDY LOAD

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Type	Hours	Percentage
Hours large group	8,0	6.40
Self study	80,0	64.00
Hours medium group	15,0	12.00
Guided activities	22,0	17.60

**Total learning time:** 125 h

## CONTENTS

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### Module 1: Budget Accounting

**Description:**

Key concepts of financial management.  
The measurement of wealth : Balance sheet  
The measurement of income: the Income Statement  
Treasury Management  
Economic and monetary flows: the difference between costs and payments.  
Amortization.  
Stock Rating  
The current assets formation  
The investment influences and its financing  
Outcome from the sale of fixed assets or non-current assets.

**Full-or-part-time:** 40h 30m

Theory classes: 2h

Practical classes: 4h

Guided activities: 5h 30m

Self study : 29h

### Module 2: Financial Accounting

**Description:**

Concept and role of financial accounting.  
Accounting technique.  
Accounts.  
Movement of accounts.  
The financial statements.  
The accounting cycle.  
Accounting entries in the enterprise.  
The General Accounting Plan for SMEs

**Full-or-part-time:** 28h 30m

Theory classes: 2h

Practical classes: 4h

Guided activities: 5h 30m

Self study : 17h

### Module 3: Financial Statement Analysis

**Description:**

Introduction to Financial Statement Analysis.  
Structure of Balance Sheet and Income Statement  
Cash Flow Statement  
Working capital and cash cycle  
Analysis of liquidity and debt  
Asset Management  
Ratios of the income statement.  
Breakeven point  
Analysis of profitability, output and financial leverage.

**Full-or-part-time:** 29h 30m

Theory classes: 2h

Practical classes: 4h

Guided activities: 5h 30m

Self study : 18h

### Module 4: Analysis of investment and financing projects

**Description:**

Concept of investment.  
Objective of the Investment analysis.  
Type of investment  
Elements of the investment  
Cash-flow economic and Cash- flow financial  
Selection standards of investment projects.  
Investment Project versus financing project.

**Full-or-part-time:** 26h 30m

Theory classes: 2h

Practical classes: 3h

Guided activities: 5h 30m

Self study : 16h

## GRADING SYSTEM

- 1º Mid-Semester Exam, weight: 35%
- 2º Mid-Semester Exam, weight: 35%
- Case Studies, weight 30%

The unsatisfactory results of the two mid-semester exam can redirect using a written test to be held the same day fixed for the final exam. 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.



## BIBLIOGRAPHY

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### Basic:

- García Parra, M.; Mundet Hiern, J. Contabilidad previsional como herramienta para directivos. [S.l.]: OmniaScience, 2016. ISBN 9788494467301.
- Amat Salas, Oriol. Contabilidad y finanzas para no financieros [on line]. 2a ed. Barcelona: Deusto, 2008 [Consultation: 15/06/2022]. Available on : <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pg-origsite=primo&docID=4641809>. ISBN 9788423426713.
- Jiménez Caballero, JL; Pérez López, C; Torre Gallegos, A. Dirección financiera de la empresa: teoría y práctica. 2a ed. Madrid: Pirámide, 2009. ISBN 9788436822984.
- García Parra, Mercedes [et al.]. Dirección financiera [on line]. Barcelona: Edicions UPC, 2004 [Consultation: 22/06/2020]. Available on: <http://hdl.handle.net/2099.3/36753>. ISBN 848301758X.

### Complementary:

- Brealey, R.A; Myers, S. Fundamentos de financiación empresarial. 3a ed. Madrid: Mc Graw-Hill, 1998. ISBN 8448120221.

## RESOURCES

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### Other resources:

- Problem portfolio for the course.
- Transparencies of every module
- The General Accounting Plan for SMEs :  
([http://www.icac.meh.es/Documentos/PGCPYME\\_2007.pdf](http://www.icac.meh.es/Documentos/PGCPYME_2007.pdf)) />