

Course guide

240338 - 240E0054 - Financial Management

Last modified: 24/05/2024

Unit in charge: Barcelona School of Industrial Engineering
Teaching unit: 732 - OE - Department of Management.

Degree: MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2014). (Optional subject).
MASTER'S DEGREE IN MANAGEMENT ENGINEERING (Syllabus 2021). (Compulsory subject).

Academic year: 2024 **ECTS Credits:** 5.0 **Languages:** English

LECTURER

Coordinating lecturer: Antoni Matas Tarruella

Others: Martinez-Mari Agell, Carles
Matas Tarruella, Antoni

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

1. Apply theories and principles inherent in the financial area in order to analyze complex situations and uncertainty, and make decisions using engineering tools.
2. Identify, analyze, diagnose, design and implement solutions in complex socio-technical systems.

Generical:

CGO1. Know and understand the organization of a company and the sciences that define their activity, ability to understand business rules and relationships between planning, industrial and commercial strategies, quality and profit.

CGO3. Acquire skills related to the design and management of complex organizations, including people management, financial aspects, production, project management, and allocation and distribution of resources for managers and management problems.

Transversal:

CT5. FOREIGN LANGUAGE: Achieving a level of spoken and written proficiency in a foreign language, preferably English, that meets the needs of the profession and the labour market.

Basic:

CB7. (ENG) Que els estudiants sàpiguin aplicar els coneixements adquirits i la seva capacitat de resolució de problemes en entorns nous o poc coneguts dintre de contextos més amplis (o multidisciplinars) relacionats amb la seva àrea d'estudi.

CB8. (ENG) Que els estudiants siguin capaços de d'integrar coneixements i enfrontar-se a la complexitat de formular judicis a partir d'una informació que, essent incompleta o limitada, inclogui reflexions sobre les responsabilitats socials i ètiques vinculades a l'aplicació del seus coneixements i judicis.

CB9. (ENG) Que els estudiants sàpiguin comunicar les seves conclusions i coneixements (i darrers raonaments que els sustentin), a públics especialitzats i no especialitzats de manera clara i sense ambigüitats.

CB10. (ENG) Que els estudiants poseixin les habilitats d'aprenentatge que els permetin continuar estudiant d'una manera d'una forma que haurà de ser en gran mesura autodirigit o autònom

TEACHING METHODOLOGY

Master lecture, practical lecture and case study

LEARNING OBJECTIVES OF THE SUBJECT

Deep knowledge of the facts and most important techniques of the Financial Management and the Corporate Finance. Ability to take part in the decision making of companies in the finance field, as well as to understand the corporate operations of businesses merges and acquisitions and the stock valuations

STUDY LOAD

Type	Hours	Percentage
Hours small group	22,5	50.00
Hours large group	22,5	50.00

Total learning time: 45 h

CONTENTS

1. Financial statements

Description:

Understanding of the financial statements in order to help in decision-making: Balance Sheet and Income Statement

Specific objectives:

Students must develop the ability to analyze the Financial Statements to understand the economic and financial situation of a company

Related activities:

1, 2, 3, 4, 10, 11, 12

Full-or-part-time: 27h

Theory classes: 6h

Practical classes: 3h

Self study : 18h

2. Economic and financial analysis to support decision making

Description:

Financial Statements understanding for a good economic and financial analysis and decision making, emphasizing the study of financial soundness, liquidity and profitability.

Specific objectives:

Students should be able to analyze a financial statement and have the ability to give an opinion about financial soundness, liquidity and profitability of a business.

Related activities:

3, 4, 9, 10, 11.

Full-or-part-time: 27h

Theory classes: 6h

Practical classes: 3h

Self study : 18h

3. Financial planning

Description:

Study of the Cash Flow Budget by means of the indirect method as the basic tool for a good short-term financial planning.

Specific objectives:

Students should be able to draw up a Financial Budget by using Excel and clearly understand the difference with the P&L in order to forecast cash position.

Related activities:

5, 9, 10, 11.

Full-or-part-time: 13h 30m

Theory classes: 1h 30m

Practical classes: 3h

Self study : 9h

4. Valuation of companies

Description:

Study of the professional techniques for the valuation of companies, emphasizing on the basic valuation (cash flow discounts) and the valuation by means of market multiples (multiple quoted and transaction companies).

Specific objectives:

Students should be able to estimate the value of a company and draw up a valuation report in a professional manner.

Related activities:

5, 6, 10, 11, 12

Full-or-part-time: 13h 30m

Theory classes: 1h 30m

Practical classes: 3h

Self study : 9h

5. Short-term financing of a company

Description:

Short-term financing sources and main financial market products

Specific objectives:

Students should be able to identify the main keys in working capital management as well as knowing the main short terms financial products available in the market.

Related activities:

7, 9, 10, 11.

Full-or-part-time: 10h 15m

Theory classes: 2h 15m

Practical classes: 3h

Self study : 5h

6. Long-term financing and corporate operations of a company

Description:

Study of the best long-term financial strategy according to the company's financial leverage situation and the economic and financial forecasts.

Specific objectives:

Students should be able to define the best long-term financial strategy and to know why debt or equity should be the tools, as well as knowing the main long-term financial products available in the market.

Related activities:

7, 9, 10, 11.

Full-or-part-time: 8h 45m

Theory classes: 1h 30m

Practical classes: 2h 15m

Self study : 5h

7. Financial math

Description:

Study of the main financial math's techniques.

Specific objectives:

To learn how to calculate the real financial cost of a financial operation. Understand the distinction between simple and compound interest, fix and variable, effective and nominal, and estimate the present value of a serie of future annuities.

Related activities:

8, 9, 10, 11

Full-or-part-time: 12h 30m

Theory classes: 1h 30m

Practical classes: 3h

Self study : 8h

ACTIVITIES

1. PRACTICE 1 FINANCIAL STATEMENTS

Description:

Resolution of a financial accounting exercise where, based on the information provided by the accounting books, students must draw up a balance sheet and a P&L perfectly organized and classified

Specific objectives:

Knowledge implementation in a real business situation.

Material:

School's cases collection

Full-or-part-time: 4h 30m

Self study: 3h

Practical classes: 1h 30m

2. PRACTICE 2 ANNUAL ACCOUNTS

Description:

Resolution of a financial accounting exercise where, based on a balance sheet and some accounting events, students must draw up a balance sheet and a P&L at the end of an exercise.

Specific objectives:

Knowledge implementation in a real business situation.

Material:

School's cases collection

Full-or-part-time: 4h 30m

Self study: 3h

Practical classes: 1h 30m

3. PRACTICE 3 ECONOMIC AND FINANCIAL ANALYSIS

Description:

Analysis of the economic and financial situation of a real company based on its financial statements.

Specific objectives:

Knowledge implementation in a real business situation.

Material:

School's cases collection

Full-or-part-time: 4h 30m

Self study: 3h

Practical classes: 1h 30m

4. PRACTICE 4 ECONOMIC-FINANCIAL ANALYSIS

Description:

Analysis of the economic and financial situation of a real company based on its financial statements.

Specific objectives:

Knowledge implementation in a real business situation.

Material:

School's cases collection

Full-or-part-time: 4h 30m

Self study: 3h

Practical classes: 1h 30m

5. PRACTICE 5 FINANCIAL PLANNING

Description:

Drawing up a short-term cash budget

Specific objectives:

Knowledge implementation in a real business situation.

Material:

School's cases collection

Full-or-part-time: 6h

Self study: 3h

Practical classes: 3h

6. PRACTICE 6 COMPANIES VALUATION

Description:

Resolution of a business valuation case by using the cash flows discount method

Specific objectives:

Application of the knowledge in a real company situation

Material:

School's cases collection

Full-or-part-time: 6h

Self study: 3h

Practical classes: 3h

7. PRACTICE 7 SHORT AND LONG TERM FINANCING. FINANCIAL STRATEGY

Description:

Resolution of some short and long-term financing cases.

Specific objectives:

Knowledge implementation in a real business situation.

Material:

School's cases collection

Full-or-part-time: 6h 45m

Self study: 3h

Practical classes: 3h 45m

8. PRACTICE 8 FINANCIAL MATH

Description:

Resolution of some financial mathematics exercises.

Specific objectives:

Application of the knowledge in a real company situation

Material:

School's cases collection

Full-or-part-time: 6h

Self study: 3h

Practical classes: 3h

9. MASTER CLASSES

Description:

Presentation of the course contents by the teaching staff: examples, exercises resolution and problems. Discussion and debate of business news and current financial topics. It is a must that students prepare the sessions in advance as well as assimilate the contents, since every new topic requires a good comprehension of the previous ones..

Specific objectives:

Knowledge acquisition and development of the specific competences.

Material:

Lectures notes, and additional material are available at ATENEA, recommended bibliography.

Delivery:

Teacher could ask for exercises in class, individually or in groups.

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

Theory classes: 30h 30m

10. QUIZES AND EXERCISES

Description:

Short quizzes in order to assure a good concepts comprehension.

Specific objectives:

Knowledge acquisition and development of the specific competences.

Material:

Material of the course

Delivery:

The same day of the quiz.

Full-or-part-time: 8h 45m

Self study: 7h 30m

Practical classes: 1h 15m



12. FINAL EXAM

Description:

Individual written exam. It can include theory or numerical exercise questions

Specific objectives:

Evaluate the acquisition level of the contents and competences of the course

Material:

Before the exam, students will be informed about the material (notes, calculator, books...) which they will be able to use during the exam

Delivery:

Resolution of the test

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

Self study: 27h 30m

Theory classes: 3h

GRADING SYSTEM

Final exam (60%)

Exercises and regular quizzes (25%)

Take-home activity to be submitted at the end of the course (15%)

The mark of the reassessment exam will replace the mark of the final exam

To have the right to the reassessment, students must have failed the course and must have attended the final exam.

EXAMINATION RULES.

They will be communicated at the beginning of the course.

BIBLIOGRAPHY

Basic:

- Ross, Stephen A. Finanzas corporativas. 9a edició. México: McGraw Hill, 2012. ISBN 9786071507419.
- Court Monteverde, Eduardo. Mercado de Capitales. México: Prentice Hall, 2010. ISBN 9786074428636.
- Brealey, Richard A. ; Myers, S. C.; Allen, F. Principles of Corporate Finance. 12th ed. New York: McGraw Hill, 2016. ISBN 9781259253331.

Complementary:

- Trigeorgis, Lenos. Real Options and Investment under Uncertainty. Massachusetts: MIT Press, 2004. ISBN 9780262693189.