

Course guide

240E0314 - 240E0314 - Financial Markets and Instruments

Last modified: 16/05/2023

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

Degree: MASTER'S DEGREE IN MANAGEMENT ENGINEERING (Syllabus 2012). (Optional subject).
MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2014). (Optional subject).
MASTER'S DEGREE IN MANAGEMENT ENGINEERING (Syllabus 2021). (Optional subject).

Academic year: 2023 **ECTS Credits:** 3.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: Alsina Casanova, Santiago

Others: Alsina Casanova, Santiago

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

1. Apply theories and principles inherent in the address area of an organization in order to analyze complex situations and uncertainty, and make decisions using engineering tools.
2. Apply theories and principles inherent in the financial area in order to analyze complex situations and uncertainty, and make decisions using engineering tools.

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:

CT3. TEAMWORK: Being able to work in an interdisciplinary team, whether as a member or as a leader, with the aim of contributing to projects pragmatically and responsibly and making commitments in view of the resources that are available.

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.

TEACHING METHODOLOGY

Lectures

Autonomous learning

Learning based on problems and discussion of cases in the practices

LEARNING OBJECTIVES OF THE SUBJECT

The main objective is to have basic knowledge of the market functioning in the financial system. The goal of the course is to give a general vision on the financial assets and the operations that can realize the investors. Also, to know the characteristic and the agents and mediators of the monetary market, capital market, derivative market and foreign currency exchange. Students will acquire the capacity to use the specific vocabulary in this field, and have the capacity to analyze the economic information and his repercussion in companies.

Specific objectives:

1. Have knowledge of the concepts and basic characteristics of the main financial markets.
2. Have a global and integrated vision of the financial markets.
3. Capacity to analyze the financial instruments that has a company.
4. Capacity to apply the theoretical knowledge into real cases or practical exercises in companies.

STUDY LOAD

Type	Hours	Percentage
Hours medium group	27,0	36.00
Self study	48,0	64.00

Total learning time: 75 h

CONTENTS

1. INTRODUCTION TO FINANCIAL MARKETS

Description:

Characteristic of the financial markets (liquidity, risk and profitability). Type of values. Instruments of fixed and variable yield. Classification of the type of markets as its types of negotiation. Individual investment and collective.

Specific objectives:

1, 2

Related activities:

1,2,3,4

Full-or-part-time: 3h

Theory classes: 2h

Self study : 1h

2. MONETARY MARKET

Description:

Concept and characteristic. Agents and mediators of the monetary market. Monetary market assets. Market of public debt in the short term. Market development and financial intermediaries.

Specific objectives:

1, 2

Related activities:

1

Full-or-part-time: 7h

Theory classes: 2h

Practical classes: 2h

Self study : 3h

3. CAPITAL MARKET

Description:

Concept and main characteristics. Agents and mediators of capital market. Types of assets. Structure and operation. Concept and classifications of share. Assessment of a share. Introduction to fundamental analysis in investing.

Specific objectives:

1, 3, 4

Related activities:

2

Full-or-part-time: 14h

Theory classes: 6h

Practical classes: 2h

Self study : 6h

4. STRUCTURE OF INTEREST RATE

Description:

Characteristics. Types of interest rate. Temporary structure of interest rate. Expectation theory definition. Calculation of the coupon-zero bond value and discount factors. Evolution of break-even chart.

Related activities:

in class

Full-or-part-time: 4h

Theory classes: 2h

Self study : 2h

5. DERIVATIVE MARKET, FUTURE & OPTIONS

Description:

Concept and characteristics of derivative markets. FRA Contracts. Operations forward-forward. Cap, floors and collar contracts. Swap of interest rate contracts (IRS) Types of futures and its basic functioning. Concept and types of options. Positions and values of an option.

Specific objectives:

1, 3, 4

Related activities:

3

Full-or-part-time: 9h

Theory classes: 4h

Practical classes: 2h

Self study : 3h

6. FOREIGN CURRENCY EXCHANGE

Description:

Introduction to the International Monetary System (IMS). The European Monetary System. Concept and characteristic of foreign currency exchange. Theory of the purchasing power parity (PPP). Loan of foreign currency without coverage. Speculation with foreign currency. Coverage arbitrage of capitals. Technical and fundamental analyses for foreign currency.

Specific objectives:

1, 3, 4

Related activities:

4

Full-or-part-time: 8h

Theory classes: 2h

Practical classes: 2h

Self study : 4h

7. TAXATION OF FINANCIAL INVESTMENTS

Description:

Introduction to basic concepts. Taxation of fixed and variable yield.

Specific objectives:

1, 3, 4

Related activities:

In class

Full-or-part-time: 3h

Theory classes: 2h

Self study : 1h

ACTIVITIES

1. EXERCISE 1 ABOUT MONETARY MARKET

Description:

Resolution of a case on capital market. Visit to Stock Market in Barcelona.

Specific objectives:

6

Material:

Available case in ATENEA

Delivery:

Exercise report 1.

Full-or-part-time: 4h

Practical classes: 2h

Self study: 2h

2. EXERCISE 2 ABOUT CAPITAL MARKET

Description:

Resolution of a case on capital market. Visit to Stock Market in Barcelona.

Specific objectives:

6

Material:

Available case in ATENEA

Delivery:

Exercise report 2.

Full-or-part-time: 4h

Practical classes: 2h

Self study: 2h

3. EXERCISE 3 ABOUT DERIVATIVE MARKET

Description:

Resolution of a case on derivative market (numerical exercise).

Specific objectives:

6

Material:

Available case in ATENEA

Delivery:

Exercise report 3.

Full-or-part-time: 4h

Practical classes: 2h

Self study: 2h

4. EXERCISE 4 ABOUT FOREIGN CURRENCY MARKET

Description:

Resolution of a case on foreign currency exchange

Specific objectives:

6

Material:

Available case in ATENEA

Delivery:

Exercise report 4.

Full-or-part-time: 4h

Practical classes: 2h

Self study: 2h

5. MASTER CLASSES

Description:

Exposition of the contents by the Professors. It is expected that the students prepare the class according to the basic bibliography and notes from ATENEA

Specific objectives:

Acquisition of the contents and competencies of the subject.

Material:

Documents in ATENEA and recommended bibliography

Delivery:

Different activities in class

Full-or-part-time: 34h

Theory classes: 14h

Self study: 20h

6. CASES AND EXERCISES

Description:

Resolution of exercises and numerical problems. Discussion and debate of current and real cases in financial markets. Students will have to work in team.

Specific objectives:

6

Material:

Available in ATENEA.

Delivery:

Individual report. Send by ATENEA.

Full-or-part-time: 10h

Self study: 10h

7.FINAL EXAM

Description:

Individual exam.

Specific objectives:

Evaluate the level of acquisition of the contents and competencies of the subject.

Material:

Previously, teacher will inform of material (calculator, books, etc.) that will be able to use during the exam.

Delivery:

Written exam

Full-or-part-time: 8h

Theory classes: 2h

Self study: 6h

GRADING SYSTEM

Written exam (60%)
Reports of the practices (30%)
Class attendance and participation (10%)

BIBLIOGRAPHY

Basic:

- Court, E. ; Tarradellas, J. Mercado de capitales. México: Prentice Hall, 2010. ISBN 9786074428636.
- Martin Marin, J.L.; Trujillo Ponce, A. Manual de Mercado Financieros. Madrid: Thomson, 2004. ISBN 8497323262.