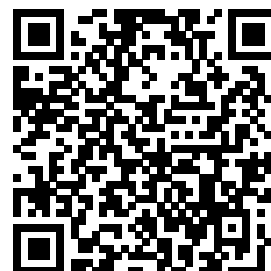


Financial Econometrics

MASTER'S DEGREE IN ECONOMICS AND FINANCE

UNIVERSIDAD INTERNACIONAL MENÉNDEZ PELAYO

This document can be used as reference documentation of this subject for the application for recognition of credits in other study programmes. For its full effect, it should be stamped by UIMP Student's Office.



GENERAL DATA

Brief description

This course is part of Module II, which contains subjects that provide advanced knowledge in a wide variety of areas of economics, freely chosen by the students. Some fields are covered in a single subject, while others are structured through several subjects in the third to fifth quarters. Students may choose from among all the electives offered, with the only restriction of taking at least three per quarter.

Name

Financial Econometrics

Code

101127

Academic year

2022-23

Degree

[MASTER'S DEGREE IN ECONOMICS AND FINANCE](#)

ECTS Credits

6

Type

ELECTIVE

Duration

Cuatrimestral

Language

English

CONTENTS

Contents

- Discrete-time valuation: the binomial model.
- Measurement theory and stochastic calculus.
- Risk neutral valuation in continuous time.
- Forwards and futures.
- Valuation of U.S. derivatives.
- Currency exchange.

COMPETENCES

General competences

G1 - Show solid knowledge of economic theory and relevant economic, econometric and computational techniques.

G2 - Apply acquired knowledge and ability to problem solve in new or unfamiliar environments within wider or multidisciplinary contexts related to the study of economics and finance.

G3 - Integrate knowledge and face the complexity of forming judgments from limited or incomplete information which includes reflections on social or ethical responsibility tied to applying economic knowledge and judgement.

G4 - Critically analyze, evaluate and synthesize new and complex ideas in relation to empirical theories and methodologies in the area of economics.

G5 - Design and complete a research project at a high academic level, forming a reasonable hypothesis, in the area of economics.

G6 - Orally present scientific and technical projects in economics to specialized and non-specialized publics, in a clear and unambiguous way.

G7 - Adequately complete written compositions and projects or scientific articles.

G8 - Organize and plan their own work, fostering initiative and entrepreneurial spirit.

G9 - Integrate in work groups dedicated to economic research projects.

G10 - Show the sufficient ability for study, synthesis and autonomy in order to, once having completed the Master's, complete a doctoral thesis in the area of economics.

Specific competences

EO15 – Thoroughly know the methods used to estimate financial market models.

LEARNING PLAN

Training activities

AF1.- Theoretical classes

AF2.- Practical classes

AF5.- Study of theoretical course content

AF6.- Solving practical exercises

AF7.- In-class preparation of presentations

Teaching methods

- Theoretical classes in which the topics of the program of the subject are developed.
- Practical classes in which students solve exercises previously distributed by the teacher.

Learning outcomes

- Understand in depth the methods used in estimating models for financial markets.

EVALUATION

Evaluation system

SE1.- Exercises

SE2.- Presentations

SE4.- Exams

FACULTY

Coordinator/s

Amengual Báez, Dante

Doctor en Economía, Princeton University

Profesor de Economía

Centro de Estudios Monetarios y Financieros (CEMFI)

Lecturers

Professor responsible for the subject

SCHEDULE

Schedule

This optional subject is part of Module II and is taught in the fourth and fifth quarters.