

Time Series 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 subject is part of Module I which contains the core subjects studied during the first two trimesters of the Master. Half of this module consists of subjects that provide the main instruments of analysis used in economics, i.e., mathematics and statistics, including in the latter a subject of econometrics. The other half are subjects of microeconomic and macroeconomic analysis. All of them form a knowledge base essential for the correct use of the subjects in Module II.

Name

Time Series Econometrics

Code

101119

Academic year

2022-23

Degree

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

ECTS Credits

6

Type

ELECTIVE

Duration

Cuatrimestral

Language

English

CONTENTS

Contents

- Univariate and multivariate time series.
- Unit roots and cointegration.
- Non-linear models.
- Inference with dependent observations.
- Specification tests.
- Dynamic regression models

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

EO12 - Be familiar with the appropriate econometrics models to describe and predict different economic time series as well as to analyze the relationships between them which are suggested by economic theory.

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

- Be familiar with the appropriate econometrics models to describe and predict different economic time series as well as to analyze the relationships between them which are suggested by economic theory.

EVALUATION

Evaluation system

SE1.- Exercises

SE2.- Presentations

SE4.- Exams

FACULTY

Coordinator/s

Sentana Iváñez, Enrique

Doctor en Economía, London School of Economics
Profesor de Economía
Centro de Estudios Monetarios y Financieros (CEMFI)

Lecturers

Professor responsible for the subject

SCHEDULE

Schedule

This elective course is taught in the third trimester, within Module II (this module is taught in the third, fourth and fifth trimesters).

In the third trimester the student can choose 3 of the following subjects, with a course load of 6 ECTS each:

Cod. 101116 - Industrial Economics

Cod. 101117 - Public Economics

Cod. 101118 - Macroeconomics II

Cod. 101119 - Time Series Econometrics

Cod. 101120 - Asset Pricing I

Cod 101121 - Corporate Finance