



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Econometrics

2425-1-F5602M002-F5602M004M

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#### Learning objectives

The course provides the basic skills to carry out empirical analysis in microeconomics and macroeconomics.

#### Contents

Students are introduced to the main issues arising in applied work for an economist.

#### Detailed program

- The simple regression model
- Multiple regression analysis: estimation, inference, asymptotics
- Multiple regression analysis: further issues
- Multiple regression analysis with qualitative information
- Heteroskedasticity
- More on specification and data problems
- Basic regression analysis with time series data
- Further issues in using OLS with time series data
- Serial correlation and heteroskedasticity in time series regressions
- Models based on Panel Data
- IV estimation and 2SLS
- Simultaneous equations models
- Models with limited dependent variables
- Advanced Time Series Topics

## **Prerequisites**

Statistics, mathematics.

## **Teaching methods**

Emphasis is placed on the use of econometric software packages as tools of quantitative and statistical analysis. Practical computer exercises are a key part of the course. Lectures conducted in delivery mode in the initial part and in interactive mode in the later part. All activities are conducted in presence.

## **Assessment methods**

Assessment is based on either an in-progress test (individual written examination and presentation of a group econometric project) or a final test (individual written and oral examination and oral presentation of an individual econometric project).

## **Textbooks and Reading Materials**

["Introductory econometrics: a modern approach"](#), by J.M. Wooldridge, Thompson South Western, Belmont, 5th ed.

## **Semester**

Second semester

## **Teaching language**

English

## **Sustainable Development Goals**

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