

Syllabus

Econometrics: Methods and Applications

- Massive Open Online Course, Coursera -
(3 ECTS)

Approved by
Academic Council
of the Master's Programme
Minutes AC2

1. **Author, lecturer** (e-mail, web-page)

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2. **Course Description**

The course introduces econometric tools to analyze and solve business and economic questions with data analysis tools. Econometrics is suitable to translate data into models to

make forecasts and to support decision making in a wide variety of fields, ranging from macroeconomics to finance and marketing. It includes simple and multiple regression, endogenous variables, binary choice data, and time series data tools.

The course is provided by Econometric Institute Erasmus School of Business. The full outline is here <https://www.coursera.org/learn/erasmus-econometrics>

a. Pre-requisites

The course doesn't require special previous knowledge and competences.

b. Abstract

Knowledge of econometrics enables student to translate data into which is essential for making forecasts and to support decision making in a wide variety of fields including macroeconomics, finance, marketing, strategy and planning.

3. Learning Objectives

- Ability to understand econometric analysis

4. Learning Outcomes

- skills for linear regression, time series, econometrics, regression analysis

5. Course Plan

The course is structured in 8 main session:

Session 1: Simple Regression

Session 2: Multiple Regression

Session 3: Model Specification

Session 4: Endogeneity

Session 5: Binary Choice

Session 6: Time Series

Session 7: Case Project

Session 8: OPTIONAL: Building Blocks

6. Reading List

a. Required

Announced by teachers

b. Optional

Announced by teachers

7. Grading System

10 point grading system is applied. After attending the MOOC a certificate is issued. The certificate has to be submitted to the study office immediately after completion of the course. After successful completion of the course an examination is undertaken.

Prerequisite for attending the examination is submission of the certificate to the study office. The examination grade is the final grade for the course.

Final control: oral group exam after final lecture (30 minutes (E))

The overall course grade (G) (10-point scale) is calculated as a sum of

$G = E$

Summary Table: Correspondence of ten-point to five-point system's marks

Ten-point scale [10]
1 – unsatisfactory 2 – very bad 3 – bad
4 – satisfactory 5 – quite satisfactory
6 – good 7 – very good
8 – nearly excellent 9 – excellent 10 – brilliant

8. Course Assignments

To be announced by teachers.

9. Examination Type

Examination is held as group oral examination. Up to 5 students form one group.

10. Methods of Instruction

Massive Open Online Course

11. Software Support, including Open-Source Database Software

Not applicable

12. Special Equipment

Not applicable