

# Special Topics in Official Statistics: National Accounts, Sampling Data Analysis

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Elective Course, 4<sup>th</sup> semester, 5 ECTS units

Course level: Graduate (MSc)

Language: Greek

## Course Description

The purpose of the course is to develop students' understanding on the way in which the Official Statistics are compiled regarding sources, methods, and the quality framework (eg. European Statistics Code of Practice). Students will also learn the basic concepts of macroeconomic theory and to calculate national accounting figures. For this purpose, empirical applications from the preparation of National Accounts according to the European System of National and Regional Accounts (ESA 2010) as well as examples of design of sample surveys in accordance with the European Regulation on Business Statistics will be used. In addition, students are trained in machine learning techniques for dealing with official statistics issues using R programming language.

## Target Learning Outcomes

Upon completion, students will have the knowledge and technical skills to meet the strict quality framework of Institutions that produce official statistics.

## Recommended Bibliography

- European Statistics Code of Practice: <https://ec.europa.eu/eurostat/web/quality/european-statistics-code-of-practice>
- European System of National and Regional Accounts (ESA 2010): <https://ec.europa.eu/eurostat/web/esa-2010/overview>
- Regulation on European business statistics: [Regulation EBS](#)
- ELSTAT., 2021. The Greek Economy [digital publication every 15 days] Piraeus: Hellenic Statistical Authority. Available: <https://www.statistics.gr/en/the-greek-economy>
- Abel, A. B., Bernanke, B., & Croushore, D. D., 2021, *Macroeconomics*. Harlow, England: Pearson.
- Kuhn, M., & Johnson, K., 2016, *Applied predictive modeling*. New York: Springer.
- Provost, F., & Fawcett, T., 2013, *Data science for business*. Sebastopol: O'Reilly.

## Teaching and Learning Activities

Face to face teaching covering theory and lab-courses.

## Assessment and Grading Methods

Written exam and projects.