



European Master in Official Statistics
 Second Cycle Degree Programme in Statistical Sciences
 Curriculum Official Statistics
 University of Bologna, Italy
<https://corsi.unibo.it/2cycle/StatisticalSciences>



ALMA MATER STUDIORUM
 UNIVERSITÀ DI BOLOGNA

Held at the Department of Statistical Sciences "Paolo Fortunati"

One of the largest statistics departments in the world. It hosts more than 80 faculty members.

Teaching and research topics concern methodological and applied statistics in the fields of data science, probability, demography, social statistics, medical statistics, biostatistics, statistics for economics, tourism management, applied economics, financial and actuarial mathematics. One of the department's leading traits is multidisciplinary.

SECOND CYCLE DEGREE

TWO YEARS MASTER IN STATISTICAL SCIENCES (120 CREDITS)

Language: English

Teaching: classroom lessons in Bologna

Open access with assessment of personal competencies

Three curricula:

- HEALTH AND POPULATION ANALYTICS
- DATA SCIENCE
- **OFFICIAL STATISTICS**



THE CURRICULUM IN OFFICIAL STATISTICS

- **Has awarded the EMOS label by the European Statistical System Committee (ESSC) in 2019.** EMOS was set up to strengthen the collaboration within academia and producers of official statistics and help develop professionals able to work with European official data at different levels in the fast-changing production system of the 21st century.
- **Has awarded the status of RSS Accredited University by the Royal Statistical Society in 2023,** for the first time in Italy and for the second time in Europe outside the UK.
- A double degree programme agreement with the ENSAI in partnership with the University of Rennes is going to be signed.

First year - mandatory courses

1. Methods and Tools for Official Statistics: Socio-Economic Statistics (6 credits - ECTS)
2. Fundamental Concepts of Statistics (10 ECTS)
3. Statistical Models and Applications (10 ECTS)
4. Bayesian Inference (6 ECTS)
5. Statistical Software (4 ECTS)
6. Social Demography (10 ECTS)

First year

- **One among (6 ECTS)**
 - Advanced Probability
 - Differential Equations
 - Differential Calculus
 - Measure Theory
- **10 ECTS from electives**

Second year - mandatory courses

1. Systems and Algorithms for Data Science (10 ECTS)
 2. Analysis of Categorical Data (6 ECTS)
 3. Methods and Tools for Official Statistics: Population and Health Statistics (6 ECTS)
- **Compulsory internship in the area of official statistics (10 ECTS)**
 - **Master thesis (26 ECTS)**

Compulsory internship

- Financially supported cross-border traineeships in organisations of the European Statistical System (ESS) and European System of Central Banks (ESCB)
- Blue Book traineeship programme: 5-month paid traineeships offered by the European Commission
- National statistical institutes (NSI) and other national authorities, among which research institutes of Ministries and agencies

Curriculum in Official statistics - Placement

PhD programs:



Public institutions and national/international companies:



Nine centuries of history

Founded in 1088, the University of Bologna is considered to be the oldest university in the Western world



Contacts:

Gabriele Soffritti gabriele.soffritti@unibo.it - Elisabetta Carfagna elisabetta.carfagna@unibo.it