

## **EMOS Study Plan** (European Master in Official Statistics)

EMOS certification, granted by the European Statistical System, can be obtained by the students who choose to continue their studies for the <u>Master's Degree Program in Statistics and Information Management, with a specialization in Data Analytics</u> and that take the following study plan:

## 1. MANDATORY COURSE UNITS (45.5 ECTS)

Mandatory Course Units	ECTS	Semester/Trimester
Forecasting Methods	3,5	1st Semester (Trimester 1)
Financial and Monetary Statistics	6	1st Semester
Multivariate Data Analysis	6	1st Semester
Time Series Analysis	4	1st Semester (Trimester 2)
Data Management for Official Statistics	3	2 <sup>nd</sup> Semester (Trimester 3)
Statistical Communication	3	2 <sup>nd</sup> Semester (Trimester 4)
Sampling and Estimation	7,5	2 <sup>nd</sup> Semester
Econometric Methods	7,5	2 <sup>nd</sup> Semester
Research Methodologies	5	Annual

## 2. ELECTIVE COURSE UNITS (19.5 ECTS)

Choose three to four elective course units, totalizing a minimum of 19.5 ECTS.

Elective Course Units	ECTS	Semester/Trimester
Computational Statistics I	6	1 <sup>st</sup> Semester
Business Intelligence I	7,5	1st Semester
Data Mining I	7,5	1st Semester
Databases Management	7,5	1st Semester
External Statistics and Globalization	6	1st Semester
Data Preprocessing	4	1st Semester (Trimester 1)
Business Intelligence II	7,5	2 <sup>nd</sup> Semester
Data Mining II	7,5	2 <sup>nd</sup> Semester
Data Collection, Administrative Sources and Big Data	6	2 <sup>nd</sup> Semester



Elective Course Units	ECTS	Semester/Trimester
National Accounts	6	2 <sup>nd</sup> Semester
Financial Reporting	6	2 <sup>nd</sup> Semester
Computational Statistics II	6	2 <sup>nd</sup> Semester
Discrete Data Analysis	4	2 <sup>nd</sup> Semester (Trimester 3)
Analysis of Variance	4	2 <sup>nd</sup> Semester (Trimester 4)

## 3. MASTER THESIS AND INTERNSHIP/ PROJECT (30 ECTS)

- Internship or project developed with the support of the Portuguese National Statistical Institute (INE), the Portuguese Central Bank (Banco de Portugal) or any other Central Bank;
- Master Thesis with a strong link to topics of Statistics of Central Banks.

Mandatory	ECTS	Semester/Trimester
Dissertation/ Work Project	30	Annual