



# Analysis



FACULTY  
OF STATISTICAL STUDIES  
**MASTER'S DEGREE**  
**BIOSTATISTICS**



# Master's Degree Biostatistics

Knowledge Branch

Sciences

Responsible Centre

Faculty of Statistical Studies. UCM

**Orientation:** scientific-academic

**Credits:** 60 ECTS

**Duration:** 1 year (2 semesters)

**Modality:** on-site

**N° of seats:** 25

[http://estudiosestadisticos.ucm.es/  
master-bioestadistica](http://estudiosestadisticos.ucm.es/master-bioestadistica)

## Objectives

The Master in Biostatistics is devoted to the specialized training in Statistics as applied to Biosciences and Health Sciences. It aims to form biostatisticians with:

- strong methodological foundations in statistics and probability,
- competence in the use of statistical packages and development of new software,
- versatile training in the disciplines of Health Sciences and Biosciences,
- ready to be in charge of statistical studies in Biosciences and Health Sciences.

## Recipients

Prospective students should hold a university degree with a solid component of Statistics. Also suitable for this master are professional or researches, with a Science degree or a degree in some branch of the Health Sciences, who have a keen interest in and needs of Statistics.

## Why Study this Master's Degree?

- The Master in Biostatistics aims to provide its graduate with a solid methodological training, so that they can develop and implement statistical tools in research studies in Biology, Medicine, Veterinary, Pharmacy and, in general, all fields related to Health Sciences and Biosciences.
- This master provides its graduates with the professional specialization and the training in statistical research required and demanded for jobs in the public sector ( official public health agencies, research centers, hospitals,...) and the private sector (pharmaceutical industry, research institutes, consulting firms,...).
- Graduates of this Master are particularly well trained to pursue work towards a Ph.D. in Statistics.

## Structure

The Master consists of 60 credits organized in modules and subjects:

- Module I. Statistics and Computer Tools:  
12 mandatory ECTS
- Module II. Research Studies Design and Dissemination of Results:  
12 mandatory ECTS
- Module III. Advanced Statistical Modelling:  
18 mandatory ECTS
- Module IV. Specialization seminars:  
6 mandatory ECTS
- Module V. Master's Thesis:  
12 mandatory ECTS

Students must take a total of 60 credits over two semesters: eight compulsory subjects and the Master's Thesis.

# Study Plan

Subject Type	ECTS
Mandatory	48
Master's Thesis	12
<b>Total</b>	<b>60</b>

Compulsory Subjects	ECTS	SEMESTER
<b>Statistics and Computer Tools Module</b>		
Probability and Simulation	6	1°
Software for Database Management	6	1°
<b>Research Studies Design and Dissemination of Results Module</b>		
Evidence	6	1°
Methodology and Research Design	6	1°
<b>Advanced Statistical Modeling Module</b>		
Applied Mixed Models	6	1°
Survival Analysis	6	2°
Bayesian Statistics	6	2°
<b>Specialization Seminars Module</b>		
Specialization Seminars	6	2°
<b>Master's Thesis</b>		
Master's Thesis	9	2





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