

Master Data Science

1.FUNDAMENTALS MODULE

This is a compulsory module, and includes five subjects.

>DATA SCIENCE PANORAMA

- Introduction to Big Data and Open Science

>DATA SCIENCE METHODS

- Statistics for Data Science
- Data Mining

>DATA MANAGEMENT

- Data models and Information systems
- Data Life-cycle: from acquisition to presentation

 **October to January**

3.PROFESSIONAL MODULE

This module includes subjects compulsory for all students

>SECURITY, PRIVACY AND LEGAL ASPECTS

>NEW DEVELOPMENTS IN DATA SCIENCE (SEMINARS)

 **April to June**

5.MASTER THESIS

An advanced work carried out autonomously by the student under the supervision of a professor of the Master. The subject and orientation of this work will depend on the chosen specialty. It will assume a work of initiation to the professional context that will allow you to join a company or a research group.

It may be developed under a three months external remunerated internship in one of the collaborating companies or research groups.

 **Start in May, to be presented by September**

2.SPECIALIZATION MODULE

The student must choose an area of specialization:

>DATA SCIENCE ANALYTICS

- Machine Learning I
- Machine Learning II
- Semantics, Linked Data, Text Data Mining

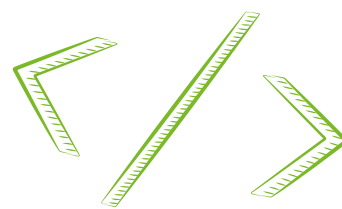
>DATA SCIENCE ENGINEERING

- Computer Systems for Big Data
- Cloud for Data Science
- Project development

>OPEN DATA MANAGEMENT

- Data Access Services and Portals
- Data Preservation
- Data Repositories

 **January to April**



4.PROFESSIONAL ORIENTATION MODULE

The student, according to qualifications and future interest, can opt for external practices and/or “Data Labs” on different areas.

>DATA LABS

- Biomedicine
- Economics and Finance
- Environment and Meteorology
- Internet of Things
- Physics and Astronomy
- Social Sciences
- +External practices at selected companies or research groups

 **May to September**

