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

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

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

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

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

CSIC Consejo Superior de Investigaciones Científicas
UIMP Universidad Internacional Menéndez Pelayo
UC Universidad de Cantabria