

## Faculty

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## Organizers



## Sponsors



## Internship Company collaborators



## Collaborators



# II University Master's degree programme in Advanced Analytics on Big Data

Real applications in Smart Cities and Urban Mobility, Smart Grids and Energy, and eHealth and Precision Medicine

**STARTS ON OCTOBER 2017**

## Contents

Hadoop, Python, Spark, MongoDB, Excel, Hive, Open Data, D3JS, Predictive Analytics, ETL, OLAP, Visualization, Smart Grids, Text Mining, Apache Flink, TensorFlow, Internet of Things, Cloud Computing, Security

## Features

- 90 ECTS credits
- Semi-distance learning
- Enrollment Fee: 6.000€
- Teachers from Academic and Business backgrounds
- Paid Internships (6 months, 1.000 euros/month)

## Contact

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## Programme

**Module 1:** Introduction and Open Data

**Module 2:** Databases

**Module 3:** NoSQL Databases

**Module 4:** Data Analytics

**Module 5:** Use Case I:  
Smart Mobility Lab

**Module 6:** Predictive Analytics

**Module 7:** Machine Learning

**Module 8:** Apache Spark

**Module 9:** Spark MLlib

**Module 10:** Use Case II:  
Smart Grids and Energy

**Module 11:** Text Mining

**Module 12:** Real Time & Internet of Things

**Module 13:** Cloud Computing

**Module 14:** Security

**Module 15:** Use Case III:  
eHealth y Precision Medicine

**Module 16:** Master Thesis

**Module 17:** Internship<sup>\*+</sup>

\* Paid Internship (6 months, 1000 euros/month)

+ Internship validation, if the student is employed

## Description

The Master in Advanced Analytics on Big Data is a master's degree offered by the University of Malaga in collaboration with companies with extensive experience in the field of data analysis in Big Data applications. With a highly professional approach, it is aimed both at professionals who wish to broaden their knowledge, technical engineers and graduates with technical training in computer science who have recently completed their studies. It offers high-level training in a specialization that in the immediate future will be highly in demand.

## Aims

The term "Big Data" refers to applications that must process and analyze an enormous amount of data to be processed quickly (or in streaming), and whose origin can be highly varied. The Master in Advanced Analytics on Big Data is focused on the ability to analyze all of this information and how to obtain valuable knowledge from it. Its contents include a significant burden on technologies: Hadoop and Spark, NoSQL databases, data visualization, predictive analytics; and the application of three real use cases; advanced topics, such as the Internet of Things, cloud computing and security-related issues will also be addressed. Internships are in leading companies in the sector.

## Requirements

Graduates in Computer Science, Telecommunications and Industrial Engineering graduates and graduates in physics, mathematics and statistics. Graduates with technical training in information technology.

Professionals without university degree but with at least 3 years of proven experience related to the master's subject matter. Senior engineers and technicians.

## Enrollment

[http://www.titulacionespropias.uma.es/informacion\\_curso.php?id\\_curso=6902381](http://www.titulacionespropias.uma.es/informacion_curso.php?id_curso=6902381)

### Pre-Enrollment:

1 April 2017 to 15 September 2017

### Enrollment:

16 September 2017 a 7 October 2017

### Fees 6.000€ (Installment Payment):

Pre-enrollment 15 September 2017: 2.000€

1st Term 7 October 2017: 2.000€

2nd Term 15 January 2018: 2.000€

## Timetable

**12 October 2017 to 30 March 2019**

### Face-to-face Classes:

Thursday and Friday, 18.00 - 21.00

**Lesson Hours:** 175

### Internship:

September 2018 - March 2019 (six months)

## Additional Information

Website: <http://bigdata.lcc.uma.es>

Twitter: [@BigDataUMA](https://twitter.com/BigDataUMA)

Blog: <https://bigdatauma.wordpress.com/>

Show your interest or ask any question:

<http://goo.gl/forms/cDOnHHYoOcq0be642>