









Master Degree Program in Data Science and Advanced Analytics





Industry and Academia. The Master degree Program in Data Science and Advanced Analytics is aimed at analytical oriented people wishing to meet the challenges of modern technology by solving new and challenging problems, who like to turn data into knowledge and aspire to develop a career in a field with huge potential for growth and with great demand worldwide.

The specialization in Data Science is more oriented to information technology and computer science. This specialization will provide stronger technical skills, allowing students to master all the most known and widely used paradigms and environments for software development. Students from this specialization will be specialized in problem solving, optimization and computational intelligence, they will be able to approach big data technically and they will have solid skills in methods like deep learning, that are very much in demand in the global market nowadays.

Goals

This Program will provide a set of interdisciplinary skills and tools such as:

- Understanding of the main paradigms associated with large databases and data warehouses;
- Understanding the processes of decision making;
- Mastering data mining tools and computational intelligence, in particular for "Big Data" related problems;
- Mastering the processes of creation and maintenance of descriptive and predictive models;
- Mastering the most used paradigms and environments of software development;
- Mastering the concept of problem solving.

Internships

The **best students** of the 1st year of the Master in Data Science and Advanced Analytics will be invited for a **6 month paid internship**, to be held during the 2nd year, in one of the program's partner institutions:

























Who is it for?

The Master in Data Science and Advanced Analytics, with a specialization in Data Science, is aimed at technically oriented people with solid scientific background, who want to strengthen and deepen

their skills on the most used paradigms and environments for software development, and apply them to solve complex real-world problems involving vast amounts of data.

Study Plan

1ST YEAR // FALL SEMESTER

Course Unit	ECTS
Data Mining	7,5
Machine Learning	7,5
Programming for Data Science	3,5
Statistics for Data Science	7,5
Storing and Retrieving Data	4

1ST YEAR // SPRING SEMESTER

Course Unit	ECTS
Big Data Analytics	7,5
Big Data Modelling and Management	3,5
Computational Intelligence for Optimization	7,5
Data Visualization	4
Deep Learning	3,5
Text Mining	4

2ND YEAR // FALL AND SPRING SEMESTER (60 ECTS)

Student Testimonial

Eleonora Sbrissa // Italy

This Master Program was my choice to change my career path into data analysis. The program is well structured, innovative, and covers a wide range of topics that are required when looking for a job in this area. The curriculum tackles a theoretical approach and an application to real life through group projects. It's also a big opportunity to meet people from all over the world for its internationality.

See what our students have to say in: www.novaims.unl.pt/MDSAA-DS



NOVA IMS

The NOVA Information Management School (NOVA IMS) is an academic unit of Universidade Nova de Lisboa. It is a research based school and the first institution in the Iberian Peninsula to integrate iSchools, an international organization that brings together the best universities in research and teaching in information management.

NOVA IMS offers bachelor, postgraduate, master and doctoral programs in information management, and information systems and technologies.

NOVA IMS' Master and Postgraduate Programs are ranked among the top Best Master Programs of the World according to Eduniversal Masters Ranking 2021.

For more information please consult the following link: www.novaims.unl.pt









Master Degree Program in

Data Science and Advanced Analytics Specialization in Data Science



Faculty Staff

The faculty staff of this program includes internationally renowned academia and reputable experts, to ensure a scientific training.

Calendar / Timetable

The program lasts four semesters: 2 for the lective part and 2 for the Master Thesis or Work Project or Internship, in a total of 120 ECTS.

The classes will be taught in English and start in September, ending in June of the next year. They run on a working hours schedule, 2 to 3 times a week.

Entry requirements

To enroll in this program, applicants must meet the following requirements:

- Hold a bachelor's degree in a compatible field (completed by September of the enrollment year);
- Be proficient in English (spoken and written).

Coordinator of the Program

Roberto Henriques

Contact

If you need more information about this or any other program, please contact:

Admissions Office Coordinator

Beatriz Branco abranco@novaims.unl.pt +351 213 828 610



How to get to NOVA IMS

Carris

701, 713, 716, 726, 742, 746, 756, 758, 770

Metro

São Sebastião (Blue and Red Lines) Praça de Espanha (Blue Line)

GPS Coordinates

38.732462 | -9.159921

Campus de Campolide, 1070-312 Lisboa Tel: +351 213 828 610 | Fax: +351 213 828 611























