

UNIVERSITY OF MESSINA | founded in 1548

# Master's Degree in **DATA SCIENCE**



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Scientific coordinator Prof. Massimo Villari massimo.villari@unime.it

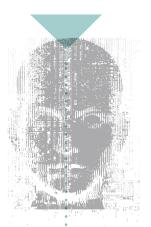
# Department

Mathematics, Computer Science, Physics and Earth Science

Duration 2 years



Master's degree in **DATA SCIENCE** 



#### -> Programme overview

The Master's Degree Course in Data Science is aimed at all Bachelor's Degree graduates who are interested in deepening information and artificial intelligence technologies useful for selecting, processing, analysing large amounts of data, applying this knowledge in corporate decision-making processes, in order to extract added value in various application areas.

#### Three curricula are available:

Information and Communication Technology (ICT), investigating Big Data, Software Defined Networking, Cloud, Edge Computing and the Internet of Things (IoT);

*Economics, exploring the principles of Data Economy, Data-driven Business and Business Intelligence;* 

And Forensics, investigating intelligent anti-fraud, anti-crime, forensic, fakeness, data governance and digital sovereignty systems.



#### Minimal entry requirements

A Bachelor's Degree of scientific or economics area is mandatory. Basic certified knowledges of mathematics and computer science are required. Scan the QR Code for further admission requirements criteria.

#### → Language requirements

International English language certificate issued by an Institution recognised by the Italian Ministry of University and Research (MUR), B2 level of the Common European Framework of Reference.

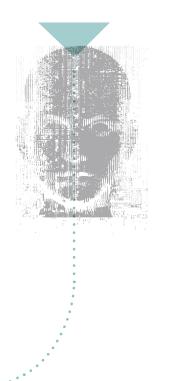
## -> Study programme Data Science class degree (LM-DATA)

#### COMMON TO ALL CURRICULA:

YEAR <b>1</b>	<ul> <li>Probability and Statistical Inference</li> <li>Advanced algorithms and computational models</li> <li>Modelling for data Analysis: module "Optimization for data science", module "Statistical models for large datasets"</li> </ul>	<ul> <li>Intelligent Systems and Machine Learning</li> <li>Data Security, Privacy and Blockchain</li> <li>Private Law for Information Technology</li> </ul>
CURRICULUM ICT		
YEAR 2	<ul> <li>High performance Computing</li> <li>Digital Management for Data Science</li> <li>Big Data: module "Big Data Acquisition", module "Big Data Analytics" Machine</li> <li>Learning in the Cloud and at the Edge</li> <li>Deep Learning Algorithms</li> </ul>	<ul> <li>Class of student's choice (among suggested ones)</li> <li>Further linguistic knowledges</li> <li>Activities of student's choice</li> <li>Internship</li> <li>Thesis</li> </ul>
CURRICULUM ECONOMY		
YEAR 2	<ul> <li>High performance Computing</li> <li>Digital Management for Data Science</li> <li>Big Data: module "Big Data Acquisition", module "Big Data Analytics"</li> <li>Information Security Management Systems</li> <li>Emerging Technologies for Accounting and Accountability</li> </ul>	<ul> <li>Class of student's choice (among suggested ones)</li> <li>Further linguistic knowledges</li> <li>Activities of student's choice</li> <li>Internship</li> <li>Thesis</li> </ul>
CURRICULUM FORENSICS		
YEAR 2	<ul> <li>High performance Computing</li> <li>Digital Management for Data Science</li> <li>Artificial Intelligence for forensics: module "Statistics for forensics science", module "Bio-inspired Artificial Intelligence"</li> <li>Bioinformatics and genetics with application in Forensic Sciences</li> </ul>	<ul> <li>Crime Scene Investigation</li> <li>Class of student' choice (among suggested ones)</li> <li>Further linguistic knowledges</li> <li>Activities of student's choice</li> <li>Internship</li> <li>Thesis</li> </ul>



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# $\rightarrow$ International opportunities

Participation in the **Erasmus + Mobility** programme both for study and training (calls published twice per year) and in the programme "Students Around the World" (SAW), call for scholarships for study at the extra-European universities in the context of international cooperation agreements.

### Tuition fees

A fixed fee ( $\in$  156.00) and a remaining amount of tuition calculated on the basis of a sliding scale. For further information:





This course helped me gain skills to use a variety of quantitative methods in the analysis of huge volumes of data. I consider myself fortunate to enroll in the Masters in Data Science program at UniMe and believe it will help me gain a global approach to Big Data and teach me how I could apply the skills I've gained moving ahead.

Raluca-Denisa Stefanica





