



MASTER DEGREE IN DATA, ALGORITHMS AND MACHINE INTELLIGENCE

EDUCATIONAL OBJECTIVES

The Master's Degree program provides theoretical, experimental, and practical skills on data representation and computation, for efficient and intelligent information processing. The program covers transversal topics in Data, Algorithms, and Machine Intelligence, as well as in-depth studies in application areas where data are big, relations are complex, and machine-learning structures are deep.

PROFESSIONAL OPPORTUNITIES

The graduate can be employed as:

- System and software analyst
- System and software designer
- Data and information scientist

LIST OF SUBJECTS

First year	credits
Data processing: Combinatorial and Probabilistic Algorithms	6
Data Processing: Big Data Management	6
Multisensory data exploration	6
Pattern discovery for life sciences	6
Knowledge representation and reasoning	6
Cybersecurity	6
Information theory and data compression	6
Data encryption and codes	6
Linguistic option: English or Italian language	6

Second year	credits
Cloud and high performance computing	6
Complex networks	6
Artificial intelligence and deep learning	6
Elective courses	12
Option	6
Internship	6
Seminars	3
Thesis	21

Optional subjects	credits
Machine Intelligence for Optimization	6
Information Retrieval and Natural Language Processing	6

COURSE COORDINATOR: Davide Rocchesso, davide.rocchesso@unipa.it, tel. +3909123891093

University of Palermo

Department of Mathematics and Computer Science

Address: Via Archirafi, 34; IT-90123 PALERMO (PA)

For more information:

Link of department: <https://www.unipa.it/dipartimenti/matematicaeinformatica>