

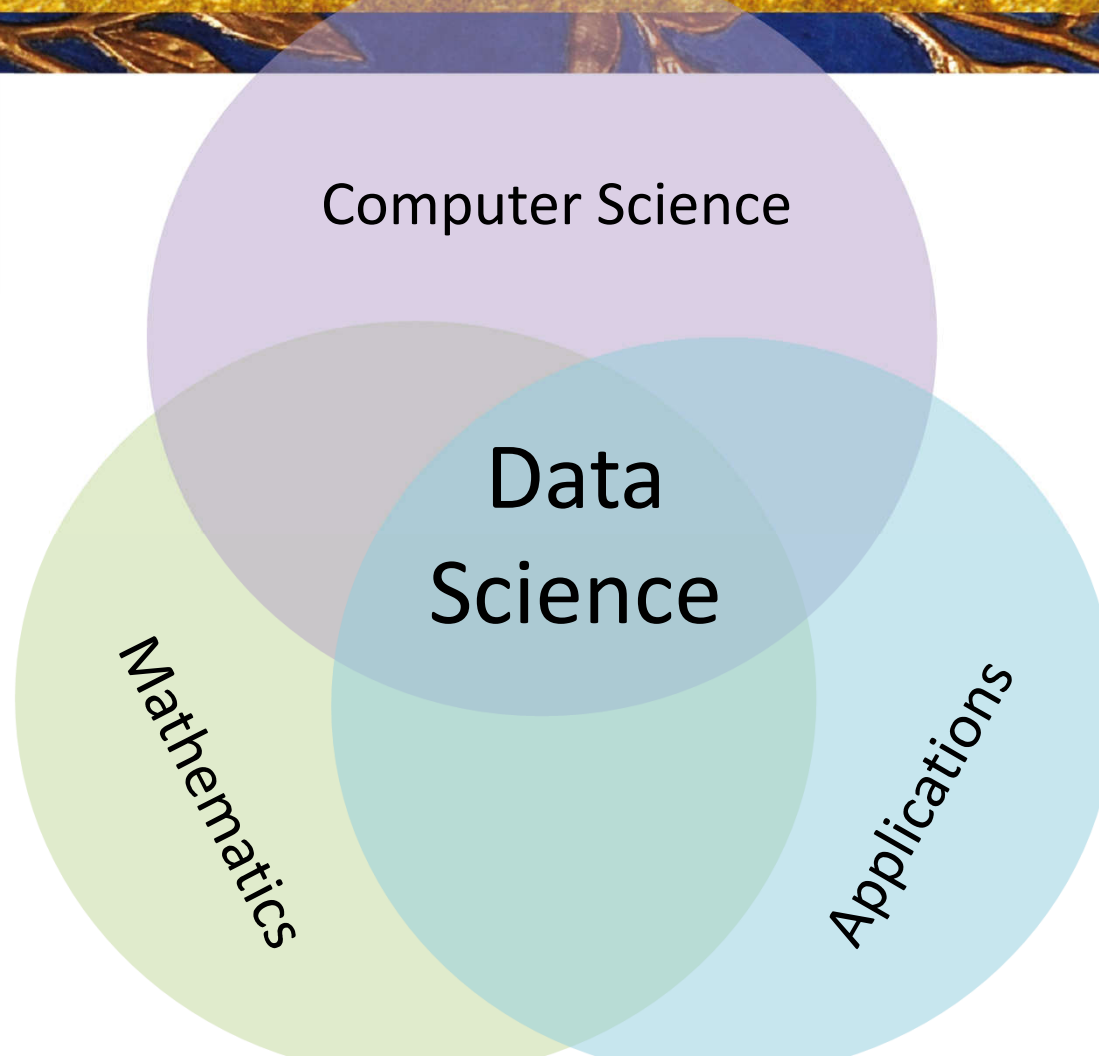
Master's Programme in Data Science

Matteo Magnani, programme coordinator

Aims and profile

As a data scientist, you will learn to extract valuable insight from one of the most important resources today: data. Use the latest data engineering, machine learning and statistical methods to turn large amounts of information into big-picture knowledge.

You are someone with not only a theoretical foundation in mathematics and computer science, but also curiosity about how large and complex sets of data can be utilised to solve a variety of real-life problems.



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Entry requirements

80c math & CS

25c Mathematics
(with Linear Algebra, Calculus)

5c Probability & Statistics

15c CS
(with Programming)

Year 1, semester 1

Introduction to Data Science (10c)	
Data, ethics and law (5c)	Statistical machine learning (5c)
Custom courses (10c) (Math orientation) (CS orientation)	

Year 1, semester 2 (Spring)

Period 3

Core courses in Data Science
(both specializations)

Data Engineering I (7.5c)

Theoretical foundations
of data science (7.5c)

Computer-intensive Statistics
and Data Mining (7.5c)

Etc.

Period 4

(DE track)

Data Engineering II (7.5c)

High-performance and
parallel computing (7.5c)

(ML&S track)

Reinforcement Learning (7.5c)

Applied Linear Algebra
for Data Science (7.5c)

Year 2, semester 1

(DE track)

Data Mining (7.5c)
Accelerator-based
Programming (7.5c)

(ML&S track)

Advanced probabilistic
machine learning (7.5c)
Theoretical statistics DS
Etc.

Project in
data science (15c)
or (7.5c)

Scientific visualization
(7.5c)
Security and privacy
(7.5c)

Year 2, semester 2

Master's thesis
(30c)