

Toward the second year of your Master Degree in **Data Science**: choosing the way!

First year classes are all mandatory,
no choice about them was required.

Class	Credits
Basics of computing	9
Statistical learning (2 modules)	12
Data base and Big data analytics (2 modules)	12
Optimization	6
Statistical laboratory	3
Data Protection Law	6
Digital Innovation and transformation management	6
TOTAL CFU	54

We asked students to select the curriculum and the classes of the second year at the time of first enrollment. This happens only for legal-formal reasons.

It is now the time to make the real well informed choices about second year to complete the **120** credits required for graduation.

DEADLINES

Proposal of your study plan may be presented on-line on the student portal **from 2026-06-01 until 2026-07-25 (strict deadlines!)**

First choice to make:

Curriculum choice	Data Analysis
	Data for Applications

The two paths share the following mandatory classes and activities (total 30 credits):

- **Deep learning class** (two modules) for 12 credits;
- **Traineeship** or Other Activities (**UAF**) for 6 credits
- **Thesis** redaction and final exam for 12 credits.

Data Analysis curriculum, second year

Deep learning (2 modules)	12 credits	mandatory
Computer Security and Data protection	6 credits	mandatory
Bayesian Statistics and Questionnaire data analysis	6 credits	mandatory
Supplementary course 1	6 credits	from given list
Supplementary course 2	6 credits	from given list
Elective course 1	6 credits	free (with limits)
Elective course 2	6 credits	free (with limits)
Traineeship or other activities	6 credits	mandatory
Thesis	12 credits	mandatory

Data Analysis curriculum, second year

Deep learning (2 modules)	12 credits	mandatory
Data science in the Factory of the future	6 credits	mandatory
IoT- based applications for intelligent systems	6 credits	mandatory
Supplementary course 1	6 credits	from given list
Supplementary course 2	6 credits	from given list
Elective course 1	6 credits	free (with limits)
Elective course 2	6 credits	free (with limits)
Traineeship or other activities	6 credits	mandatory
Thesis	12 credits	mandatory

Supplementary courses

The official rules for students enrolled in 2025-26 prescribe that the supplementary classes have to be chosen respectively from two different lists. Experience has proven that this is too restrictive.

There is now only one list from where to pick up your **two choices** as follows:

Course	credits	term
Accounting information systems	6	1
Big Data Sensing, Compression and Communication	6	2
Cloud Computing and Big Data	6	2
Data analysis for public health	6	2
Multimedia data modelling	6	1
Time Series for Dynamical Systems	6	2
Introduction to Scientific Computing	6	2
Research Design and Data Analysis in Political Sciences	6	1
High Tech Markets, Industrial Organization and Growth	6	1
Time Series Analysis for Economics and Financial Data	6	1

Students of 'Data Analysis' curriculum may also select:

Course	credits	term
Data science in the Factory of the future	6	1
IoT- based applications for intelligent systems	6	2

Students of 'Data for Applications' curriculum may also select:

Course	credits	term
Computer Security and Data protection	6	1
Bayesian Statistics and Questionnaire data analysis	6	2

Elective courses

These course must cover at least **12** credits.

These course may be selected (theoretically) from ANY other course offered in Catania University but there are few things to pay attention to:

- a) The chosen course has to be a course of second level degree (magistrale)
- b) The chosen course must be coherent with the professional profile of a Data Science laureate (this step is verified by the Faculty council)
- c) If you chose for more than 12 credits only 12 of them will be valuated toward your Degree, the other will, of course, be in your academic career but with no weight on the final grade of the Diploma.

A general advice is to choose courses within our three Departments (Engineering, Math and computer Science, Economics) since this will make logistic of attendance easier for you.

After July 25th the Faculty will decide to accept your proposed study plan or to ask you to revise it.

The decision will be taken in early September and you will check about it on the portal.

WARNING

The Supplementary course will be activated only if there will be a sufficient number of request for them. The rule is that must be the minimum 5 students that ask for a course. For this reason it may be that even if you make your choice in observance with the rules of the Course we **may** ask you, in September, when the statistics of your requests will be stable to modify your choice if it includes a course that cannot be activated.

We are thankful for your patience and cooperation in these cases.