# **Admission procedures**

Applicants that meet the entry requirements can send their application on-line.

### Joint programme with

Department of Computer Science Via Celoria, 18 – 20133 Milan



#### **Online Application**

- Curriculum Vitae
- Official transcript of records
- Copy of ID or Passport
- B2 level English certificate (if any)



DSE Secretariat e-mail: dse@unimi.it

Department of Economics, Management and Quantitative Methods Via Conservatorio, 7 - 20122 Milan

# TWO-YEAR MASTER DEGREE IN

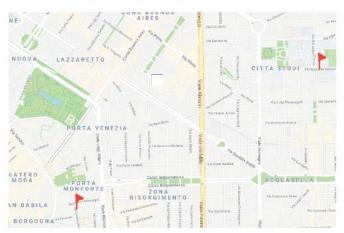
#### An application fee of 30€ is required. Credit card or MAV payments accepted.

The DSE Admission Board will evaluate academic and personal background and will invite eligible candidates who meet the entry requirements for an interview to be held online (e.g., via Teams or similar) in June and in July.

#### For further details:

https://dse.cdl.unimi.it
https://www.facebook.com/dseunimi
@ @dse\_unimi

#### How to reach



# **Data Science for Economics**

(Laurea Magistrale LM-DATA)





# **OVERVIEW**

The Master degree in Data Science for Economics aims at offering an exclusive and high-quality study programme.

This internationally-oriented master degree is intended to provide students with both an excellent academic training and operational skills, as well as with a promising outlook for a future career as **data scientist**.

The Master degree in Data Science for Economics is a genuinely multidisciplinary programme, offering a well-balanced set of courses in computer science, statistics and economics. The programme is entirely taught in English.



# QUALIFICATIONS

Graduates of the Master's programme in Data Science for Economics are qualified to be tomorrow's experts in the increasingly complex world of new data emerging in all fields, in particular in Economics.

Prospect careers include: Data Scientist Data Analyst Data Driven Economist Data-Driven Decision Maker Analyst of development projects or economic policies

## THE STUDY PROGRAMME

FIRST YEAR	ECTS	Area
Statistical Theory and Mathematics	12	math/stat
Coding for Data Science and Data Management	12	cs/stat
Data-Driven Economic Analysis	12	econ
Machine Learning and Statistical Learning	12	cs/stat
Dynamic Economic Modeling	9	econ
Total number of credits in the first year	57	

SECOND YEAR (mandatory courses)	ECTS	Area
Privacy, Data Protection, and Massive Data Analysis in emerging scenarios	12	cs
Cybersecurity and Protection of Personal Data: Legal and Policies issues	6	law
Cumulative number of credits	75	

SECOND YEAR (two alternative paths)	ECTS
Data Science path	18
Economic Data Analysis path	18
Cumulative number of credits	<i>93</i>

SECOND YEAR (further activities)	ECTS
Elective courses	9
Transversal skills	3
Internship	3
Master's thesis	12
Total number of credits at the end of the programme	120

Each alternative path consists of three courses chosen among those provided by the faculty board. Students can also add elective courses or laboratories to complete their study plan.

DSE enrolment fees vary from a minimum of  $\in$  156 to a maximum of about  $\in$  4.000 per year, depending on family income.

# ENTRY REQUIREMENTS

This programme is intended for highly-qualified national and foreign students willing to explore advanced topics in computer science, statistics, and economics with the aim of becoming data scientists.

In the second year, students may choose their favorite path among: Data Science (DS) and Economic Data Analysis (EDA).

Courses available for the DS path: Project Management and Innovation, Marketing analytics, Functional and Topological Data Analysis, Network Science, Reinforcement learning

Courses available for the EDA path: Causal Inference and Policy Evaluation, Experimental Methods and Behavioral Economics.

Courses available for both paths: Advanced Multivariate Statistics, Bayesian analysis, Text Mining and Sentiment Analysis, Time Series and Forecasting.

80-100 students are expected to enroll each year.

Admission is based on academic excellence and background coherence.

Applicants must possess an adequate knowledge in economics, statistics, computer science, and mathematics, as well as English (B2 level or higher). Candidates for admission to the master's degree course may come from various bachelor's, but must have earned at least 30 ECTS in computer science and mathematics (scientific disciplinary sectors: from MAT-01 to MAT-09, INF-01, ING-INF/05) and/or in the area of economic sciences and statistics (scientific disciplinary sectors: SECS-S/01, SECS-S/02, SECS-S/03, SECS-S/06, SECS-P/05, SECS-P/01, SECS-P/02, SECS-P/03, SECS-P/07, SECS-P/08, SECS-P/10).

Full details on this Master's programme: https://dse.cdl.unimi.it