



Università
di Genova

DIEC DIPARTIMENTO
DI ECONOMIA

Corso di laurea magistrale in Economics and Data Science

LM-56

<https://courses.unige.it/11267>

<https://economia.unige.it/en/node/1321>

The course

Economics and Data Science



EDS

ECONOMICS AND DATA SCIENCE

This degree course aims at creating a new professional figure that is in high demand on the market, which is characterised by the combination of economic and quantitative skills that are indispensable in the information society.

Economics and Data Science



In 2019, the Data Analytics market reached a value of €1.7 billion, growing by 23% compared to 2018, more than twice as much as in 2015 (Politecnico di Milano, Report Big Data 2020).

Economics and Data Science



The growing relevance of digital information, the increase in online commerce, the ability to manage and make usable big data, the change in firms' management and organisation in a data-driven perspective are the elements that are driving the Data Analytics market growth.

Economics and Data Science



Among the most required professional profiles in the coming years, there will be experts in:

- data analysis
- cyber security
- artificial intelligence
- market analysis

Economics and Data Science



Digital Transformation and Eco-sustainability will play a decisive role in characterising the employment needs of the various economic sectors, involving around 30% of the workers that businesses and the Public Administration will need over the next five years (Unioncamere Report on employment in the medium term 2019-2023).

Economics and Data Science



The search for e-skills will not be confined to "technical" functional areas (Information Technology, R&D), but will increasingly be also present in other areas: administration, human resources, general services and staff functions. More than 9 out of 10 profiles are associated with the demand for e-skills.

Economics and Data Science



The large part of the demand will come from the public administration and large bureaucratic organizations. These skills will be required not only by private companies but also by the health. Indeed, the city's main hospitals have made themselves available to receive trainees.

Medium-term forecast of employment and professional needs in Italy (2019-2023)

Employment needs with eco-sustainable and digital skills and by "supply chain" - 2019-2023
(Source: Unioncamere-ANPAL, Excelsior Information System)

	Total needs (V.A.)		Annual average (V.A.)	
	Scenario A	Scenario B	Scenario A	Scenario B
TOTAL	2.725.500	3.029.800	545.100	606.000
Eco-sustainability	518.100	576.000	103.600	115.200
Digital	268.800	300.100	53.800	60.000
Chains				
Health and well-being	361.500	381.000	72.300	76.200
Education and culture	140.200	161.200	28.000	32.200
Mechatronics and Robotics	68.800	82.900	13.800	16.600
Mobility and Logistics	85.400	98.200	17.100	19.600
Energy	39.800	42.600	8.000	8.500

Scenario A: IMF forecast

Scenario B: Government forecast

Forecasts include *expansion demand* as well as *replacement demand*

The aim of the course

The aim



To create a new professional profile, absent from the educational landscape of the University of Genoa and strongly demanded by the market, characterized by the combination of economic and quantitative skills that are necessary in the information society.

The aim



The graduate in Economics and Data Science will have an in-depth knowledge of the economic theory underlying the choices of agents and the functioning of markets. In addition, he/she will acquire high competences in Mathematics, Statistics, Econometrics and in main Big Data analysis techniques.

The aim



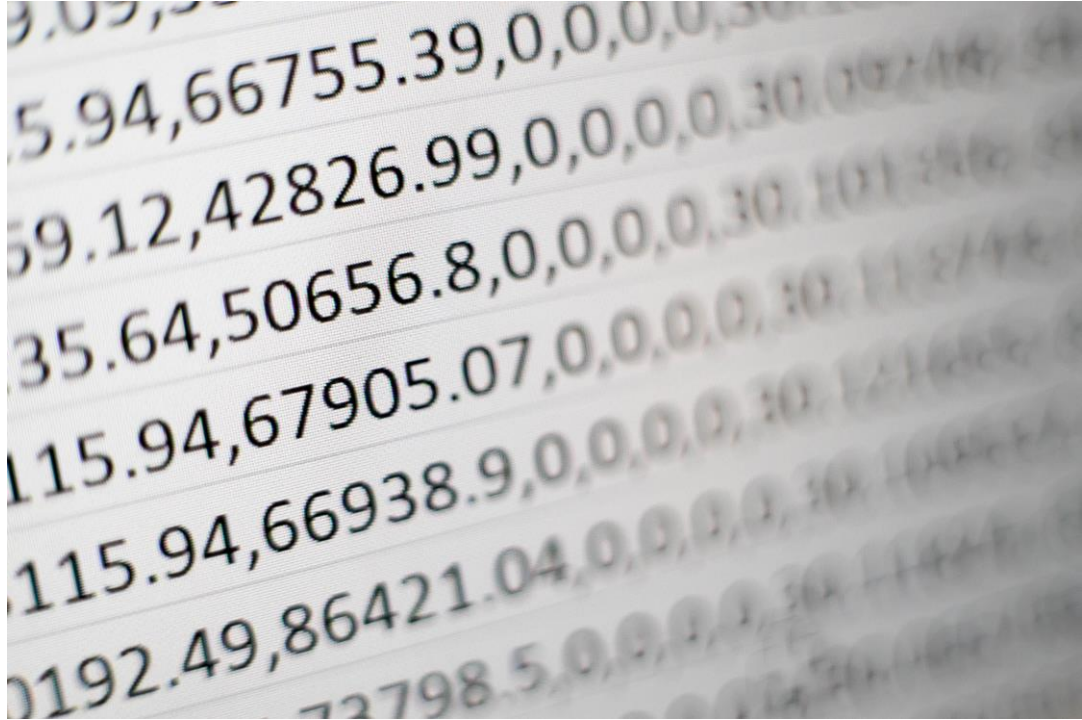
The course will emphasise the acquisition of practical expertise in data processing and interpretation, thanks to the collaboration of the different actors involved in the project.

The aim



As previously explained, the organizations involved in the project made themselves available to form trainees.

The aim



The high level of skills acquired during the course will enable graduates to perform economic-quantitative analyses independently and to interact with data science experts. Such analyses are at the basis of improved decision-making processes in both business and institutional settings.

The aim



Economics and Data Science will be the first fully English-language Master's Degree course in the School of Social Sciences that will also be open to bachelor graduates from other Departments or Universities.

The aim



The small class size that we would like to maintain will permit innovative teaching strongly oriented towards full collaboration with the world of work.

The EDS graduate

Expert in...



The graduate in Economics and Data Science will have an in-depth understanding of the economic theory underlying the choices of agents and the functioning of markets.

Career opportunities



The Master's degree course in Economics and Data Science prepares students for a variety of highly qualified occupational and career opportunities, mainly in the field of financial markets and data analysis in the areas of energy, health and the environment.

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