



PhD in DATA ANALYTICS AND DECISION SCIENCES - 41st cycle

Number of scholarship offered	1
Department	DIPARTIMENTO DI ELETTRONICA, INFORMAZIONE E BIOINGEGNERIA

Description of the PhD Programme

The Ph.D. program in Data Analytics and Decision Sciences (DADS) aims at training highly qualified senior data analysts and data managers capable of carrying out research at universities, international institutions, tech and financial companies, regulatory authorities, and other public bodies. The program stems from the cooperation between three departments: Dipartimento di Elettronica, Informazione e Bioingegneria (DEIB), Dipartimento di Ingegneria Gestionale (DIG), Dipartimento di Matematica (DMAT), and the center for Health Data Science Center of Human Technopole. It allows the enrolled students to work in a highly interdisciplinary environment with strong connections to international research centers and private companies. The program provides successful candidates with the opportunity to acquire a high degree of professional expertise in specific scientific and technological fields. The program lasts three years: upon its successful completion and final exam, candidates will be awarded the title of PhD in Data Analytics and Decision Sciences. The first year is devoted to the courses that build the broad competence and the strong interdisciplinary set of skills required by data analytics. The next two years focus on the development of the Doctoral thesis. Students are required to spend at least one semester in a research institution abroad, taking advantage of the network of international collaborations of the three departments involved in the program. All the students enrolled in the DADS Doctoral Program are supported by scholarships from public institutions and private companies.



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OPEN SUBJECT Research Field: DATA ANALYTICS AND DECISION SCIENCES

Monthly net income of PhDscholarship (max 36 months)

€ 1400.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field	<p>The PhD program in Data Analytics and Decision Sciences aims at breeding the next generation of data scientists who will tackle the challenges and the opportunities created by the increasingly larger availability of data, cheap storage, and computer power. Data scientists who can capture the most relevant aspects of phenomena in play, develop adequate models, supervise the development of analytic pipelines, critically analyze the result, and support the technological transfer that the results might enable.</p>
Methods and techniques that will be developed and used to carry out the research	<p>The research aims at developing novel approaches for data analytics and decision science including novel statistical methods for complex data, new econometric setups, methods of advanced machine learning, as well as technological solutions to integrate massive amount of data from heterogeneous data sources.</p>
Educational objectives	<p>The research will be carried out in collaboration with the team of applied statisticians, economists, computer and management engineers from three departments, the Department of Management, Economics and Industrial Engineering, the Department of Mathematics, and the Department of Electronics, Information and Bioengineering. Within this lively and stimulating academic and research environment, the doctoral student</p>



	will be educated to become a skilful researcher in Data Science.
Job opportunities	The profile of Data Scientist and the technological and methodological solutions proposed are of interest for a broad range of actors, including International institutions, policy makers, statistical and research centres, large corporations that aim to analyse heterogeneous data coming from various datasources.
Composition of the research group	11 Full Professors 5 Associated Professors 0 Assistant Professors 40 PhD Students
Name of the research directors	Any Faculty Members

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Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents	--

Scholarship Increase for a period abroad	
Amount monthly	700.0 €
By number of months	6

Stage and period abroad	
Institution or company where the candidate will spend the period abroad (name and brief description)	
By number of months abroad	0

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
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There are various forms of financial aid for activities of support to the teaching practice.

Educational activities (purchase of study books and material, funding for participation in courses, summer schools, workshops and conferences):

Financial aid per PhD student per year:

1st year: max 1.902,38 euro per student

2nd year: max 1.902,38 euro per student

3rd year: max 1.902,38 euro per student

Teaching and lab assistantship: availability of funding in recognition of supporting teaching and lab activities by the PhD student.

Further support is available for students who engage in activities of teaching or additional lab duties coherent with their academic mission and doctoral training.

The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.

Computer availability:

1st year: *individual use*

2nd year: *individual use*

3rd year: *individual use*

Desk availability:

1st year: *individual use*

2nd year: *individual use*

3rd year: *individual use*